

PERFORMANCE, AND TO DETERMINE IF CHANGES FROM EXPERIMENTAL PROCEDURES WERE RELATED TO VARIATIONS IN ACHIEVEMENT MOTIVE. THE AUTHORS NOTED THAT TRADITIONAL COUNSELING TECHNIQUES HAVE NOT BEEN EFFECTIVE IN ALTERING ACHIEVEMENT PATTERNS OF LOW ACHIEVING STUDENTS. FIFTY-FIVE NEGRO JUNIOR HIGH SCHOOL BOYS FROM TWO SCHOOLS IN THE SAN FRANCISCO BAY AREA WERE DIVIDED INTO AN EXPERIMENTAL GROUP OF THIRTY SEVEN, AND TWO CONTROL GROUPS OF NINE EACH. PRE- AND POST-TESTS OF INSIGHT AND SCHOOL ATTITUDES WERE ADMINISTERED TO THE EXPERIMENTAL GROUP AND ONE CONTROL GROUP. THE CONTROL GROUP EXPERIENCED TRADITIONAL GROUP COUNSELING PROCEDURES, WHILE THE EXPERIMENTAL GROUP WAS SUB-DIVIDED INTO SMALLER GROUPS OF EIGHT TO TEN STUDENTS TO ALLOW EACH STUDENT MAXIMUM OPPORTUNITY TO PARTICIPATE AS HE WISHED. A FOLLOW-UP ATTEMPT ONE YEAR LATER INVOLVED ALL GROUPS. THE FINDINGS OF THE STUDY DID NOT DEMONSTRATE THE SUPERIORITY OF THE EXPERIMENTAL METHOD. (SF)

EDO 13144

Increasing the Academic Achievement of Culturally Disadvantaged Youth

Small Contract Project S-185

Lawrence H. Stewart
Robert W. Moulton

University of California

Rec'd 1/88

EDO 13144

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

INCREASING THE ACADEMIC ACHIEVEMENT OF CULTURALLY
DISADVANTAGED YOUTH

Small Contract Project S-185

Lawrence H. Stewart
Robert W Moulton*

University of California
Berkeley 4, California

1964-- 1966

The research reported herein was supported by the Cooperative Research Program of the Office of Education, U. S Department of Health, Education, and Welfare.

*Now at the University of Michigan, Ann Arbor, Michigan.

ACKNOWLEDGEMENTS

The investigators gratefully acknowledge the assistance of Mr. James W. Napper, Ramiro Reyes, Hayward Temple, and Fred Stroud who served as counselors and who assisted in the data collection; of the numerous research assistants who helped in data collection and analysis; and of Mrs. L. Mego who typed the manuscript.

We are also appreciative of the assistance and support provided by the cooperating school districts.

CONTENTS

	<u>Page</u>
ACKNOWLEDGEMENTS	ii
LIST OF TABLES	iv
SUMMARY	v
INTRODUCTION	1
PROBLEM	2
PROCEDURES	6
SPECIFIC PROCEDURES	7
RESULTS	14
DISCUSSION	32
BIBLIOGRAPHY	38

APPENDICES

- A. Description of Project Study Accompanying Original Contract Application
- B. Teacher Rating Form
- C. Students' Self- Reported Attitude School Form

LIST OF TABLES

<u>Table</u>		<u>Page</u>
1	Analysis of Covariance: Adjusted Means, Standard Errors and F Values for GPA and Test Anxiety	16
2	Means and Standard Deviations for Measured Achievement Motives	18
3	Data and χ^2 Values Associated with Main and Interaction Effects	19
4	χ^2 Analyses of Changes in GPA of Experimental, Counseled-Control and Non-Counseled Control Groups	21
5	Teachers' Mean Ratings on Student School Behavior	23
6	Students' Self-Reported Attitude Toward School. Proportions of Alternative Responses in Spring 1965 and Spring 1966	25

SUMMARY

Problem

The study described in this report is part of a projected program of research concerned with achievement-related behaviors of disadvantaged youth. This pilot study was an attempt to determine the potential effectiveness of experimental counseling procedures in improving the academic performance of Negro boys from ghetto backgrounds. The procedures were mainly based on a theory of achievement motivation and risk-taking behavior developed by David McClelland, and by John Atkinson and his co-workers. Procedures were also based, in part, on research dealing with social mobility.

The objectives of the study were:

1. To determine if experimental procedures were more effective than traditional group counseling techniques in improving academic performance and achievement-related attitudes.
2. To determine if changes resulting from experimental procedures were related to variations in achievement motive.

Procedures

The subjects were Negro boys of junior high school age; judged by their counselors and teachers to be academically able and performing at a level well below this judged ability.

Thirty-seven experimental subjects in groups of eight to ten had 14 highly structured counseling sessions. One control group of nine subjects

had an equal number of "traditional" group-centered interviews. A second control group was identified but given no attention until the final follow-up procedures.

The French Test of Insight and a questionnaire designed to assess attitudes toward school and achievement-related goals were administered to experimental subjects and to counseled controls, prior to the group sessions. At the end of the counseling sessions the instruments were administered a second time to the same subjects. One year later the instruments were administered a third time to these subjects and for the first time to the non-counseled control group. Teachers were asked to rate the subjects on achievement related attitudes and behaviors, and information relative to academic performance was obtained from cumulative records.

Findings

In several instances accumulated evidence would indicate that experimental subjects did improve in academic performance and in achievement-related attitudes. However, both counseled and non-counseled controls showed similar gains. Thus the findings did not demonstrate the superiority of the experimental procedures.

A number of possible explanations for the failure to obtain expected results were examined. These included:

1. Limited ability of counselors to translate the abstract theoretical constructs into practical counseling procedures.
2. Lack of systematic follow through with subjects after completion of the group sessions.
3. The concerted efforts by society on many fronts to improve the social conditions of the disadvantaged.

While this study produced little evidence supporting the superiority of the experimental procedures, it did provide bases for modifying the procedures and for improving the designs of future studies. Modified procedures are already being tested with several groups of various ethnic origins. The reactions of subjects to the study variables have demonstrated that these variables are significant ones for these youth; and that their use facilitates communication between counselors and disadvantaged individuals. Furthermore, recordings of the group sessions have provided a wealth of information which is being used in our counselor education program to sensitize counselors to the problems of disadvantaged youth, and to provide leads for ways of helping these youth to cope with such problems.

INTRODUCTION

Objectives

This study had as its goals two separate but related objectives. First, experimental procedures designed to improve the academic performance of high-ability, low-achieving Negro boys from low socio-economic status backgrounds were tried out with relatively small numbers of subjects. The procedures involved a series of highly structured group counseling sessions. The sessions were structured around variables central to a risk-taking, achievement motivation model developed by Atkinson (1958), and around variables gleaned from research on social mobility.

A second objective was to determine whether subjects with differing amounts of achievement motive as measured by projective devices would respond differentially to the experimental procedures. The study was initiated with the expectation that subjects high on the need achievement scale would profit most from the group sessions.

Essentially this investigation was a pilot study in which we were attempting to adapt some rather abstract theoretical concepts to the practical problem of helping Negro youth from ghetto backgrounds to perform more effectively in an academic setting. It represented our first attempt to systematically apply these concepts outside of laboratory conditions. Therefore, most of the materials and procedures were developed as the study progressed; counselors were able to exercise a considerable amount of initiative in presenting the concepts to their respective subjects. From our experience with the subjects and counselors and from the findings of the study we are hopeful that in the future we will be able to design projects of much broader scope.

Problem

Traditionally, social and occupational mobility in America has followed a rather characteristic pattern, particularly for white minority groups. The first job for a member of one of these minorities has been of the unskilled variety. Parents saved their earnings so that their children could obtain a higher education than they had received. The children were then able to move up to skilled jobs or, in some instances, to professional occupations. With improved occupational status, second or third generation families moved from ghettos and gradually became assimilated into the mainstream of American society.

This pattern of mobility is not likely to be continued in the next decades. High school diplomas are already required for the most menial jobs (see Business Week, August 11, 1962, pp 50-52). Even if a diploma were not required, there is some indication that automation will greatly reduce the number of unskilled or "stepping-stone" jobs. Thus, in the future, youth from culturally disadvantaged backgrounds will be confronted with the necessity of achieving, in one generation, great strides in terms of job level -- at least from an unskilled and perhaps unemployed status to the skilled-technical level. It is improbable that families can provide the impetus and support necessary for these transitions. Schools must find means, probably through improved guidance services, for helping disadvantaged youth prepare realistically for the future. Otherwise, an increasing proportion of these youth may find themselves excluded from the labor market.

The problems for the American Negro are particularly acute. In the past traditional patterns of upward mobility have not been readily available to him. Even with an advanced education, he often could not obtain a job commensurate

with his training and ability. In many instances he was simply denied access to educational opportunities. Although employment opportunities have increased markedly in the past few years, many Negroes do not have the necessary skills and educational background to permit them to compete effectively with whites for available jobs. During the past two decades the Negro has made considerable progress; still, as Fein (1965 *Dialectus* 815-846) suggests, the economic and social gap between Negro and white continues to widen.

Many young Negroes do not perceive educational achievement as a means to provide socio-economic mobility for themselves. High school dropout rates, high truancy, and high delinquency rates among these youth attest to this fact. When they are unable to meet their needs through educational channels, they then may resort to anti-social or other means. Occasionally riots have provided confrontations with the power structure that have resulted in improved employment opportunities; educational institutions cannot report any such dramatic encounters. The potential explosiveness of the situation has been pointed out by Conant in his book, Slums and Suburbs. The urgency of Conant's warning is underscored by the riots in Watts during the summer of 1965 and in major cities throughout the nation in 1966.

An increase in the educational opportunities for the Negro, while essential, will not necessarily be sufficient in and of itself to improve his economic and social position. It is equally important that attention be devoted to improving his ability and willingness to take full advantage of these expanding educational opportunities. If he does not express his achievement-strivings through academic channels, and if he does not learn the achievement-related skills which are requisite to high academic performance, the Negro will

quite likely continue to experience considerable difficulty in his attempts to improve his economic and social status.

While the need to increase the academic achievement strivings of low socio-economic status Negroes -- and indeed of many other disadvantaged groups -- is generally recognized, the technology and procedures for bringing about this increase are not clearly understood. Counseling, both on an individual basis and in groups, is frequently considered to be an important aspect of any program designed to improve academic achievement. One can hardly peruse the provisions of the 1965 Elementary and Secondary Education Act and of the Economic Opportunities Act without becoming aware of the fact that Congress places a great deal of reliance on counseling as a means of improving the educational and economic conditions of the culturally disadvantaged.

But how are counselors supposed to help the culturally disadvantaged profit from the educational experience? If one takes current research on the effectiveness of counseling with academic underachievers seriously, it is apparent that counseling procedures now in use may need to be modified rather drastically if they are to have any appreciable impact on the academic problems of the disadvantaged. In a brief review of relevant literature, Leona Tyler (1961) found little evidence to show that counseling, as traditionally carried out, can significantly alter the academic achievement patterns of low achieving students of any ethnic or socio-economic background.

Of course, the lack of positive evidence of counseling effectiveness in increasing academic achievement can be explained in a number of ways. Perhaps the evaluative experiments have been designed poorly; undoubtedly there is some validity to this interpretation. But maybe counseling has been concerned

with inappropriate variables. For this study we have assumed that the latter explanation is largely correct.

If new variables are to be added, how does one decide what to include? One basis for decision might be the work of Dickenson and Truax (1966) who have focused on the influence of various therapeutic conditions with some degree of success. We turned for guidance to a theory of achievement motivation proposed by John W. Atkinson and his associates and to research relevant to social mobility.

The theory and research on which this study was based has been reviewed at some length in Appendix A. To summarize briefly: Sustained achievement-related behavior depends in large degree on a class of incentives or motives. The individual can strive to achieve for a wide variety of reasons, such as the need for power or of affection. The incentive of most interest to us at the moment is the achievement motive. This motive is characterized by striving for standards of excellence and unique accomplishment and by long-term involvement in achievement-related behaviors. Presumably, the motive is derived out of early parent-child relationships with respect to independence demands (Winterbottom, in Atkinson, 1958). Once acquired, the motive is thought to be relatively stable (Atkinson, 1958; McClelland, 1953). It should be noted, however, that McClelland (1965) has recently changed his mind about the possibility of modifying the motive in adulthood. For this study, we have assumed that the motive is resistant to change in junior high school subjects.

Research to date indicates that the relationship between academic achievement and the achievement motive as measured by projective devices (n Ach) is rather low; correlations are typically in .30 to .40 range. The degree of relationship which might be expected between n Ach and performance could be reduced or increased substantially by a number of mediator variables such as higher personal or environmental blocks. If the achievement motive is stable, focusing on the mediator variables would appear to an appropriate strategy for increasing academic achievement. These variables are described in Appendix A. The basic problem underlying this study, then is to determine whether or not focusing by means of group counseling procedures, on the mediator variables will be followed by a level school achievement on the part of the subjects which is more nearly commensurated with their presumed academic ability.

It seems relevant to point out that the theory on which this study is based should apply to any group of males regardless of ethnic and socio-economic backgrounds. We are not at all sure about its applicability for females so they have not been included in the study sample. Negro boys were selected for the study because problems affecting their school achievement are probably more intense and more easily identifiable than are those affecting other groups.

PROCEDURES

General Design

The general procedures can be presented as follows:

Experimental Group

pre-tests	experimental procedures (14 weeks)	post-tests	follow-up approximately 1 year after start of project
-----------	---------------------------------------	------------	---

Control Group I

pre-tests	group sessions - special attention (14 weeks)	post-tests	follow-up approximately 1 year after start of project
-----------	---	------------	---

Control Group II

no attention	follow-up approximately 1 year after start of project
--------------	---

SPECIFIC PROCEDURES

Pretesting

The following data were collected for all subjects in the Experimental Group and Control Group I. From the cumulative record, information was obtained concerning evidence of academic achievement, mostly in the form of grades.

Original plans called for an examination of each subject's records for any evidence of ability and achievement strivings. Unfortunately, these records were not sufficiently standardized or complete to permit meaningful comparisons.

From questionnaires given to each subject and from the content of the sessions, information was solicited concerning attitudes toward school, vocational aspirations, feelings about status with respect to white peers, etc. In addition, each subject was given the French Test of Insight as a projective measure of the achievement motive, and the high school form of the Sarason Test-Anxiety Questionnaire (TAQ) as a measure of fear of failure.

The development of the Test of Insight and much of the relevant validity data have been presented in Atkinson (1958). Originally we had planned to use the Atkinson thematic pictures but the plan was altered since we were unsure of the impact on the subjects of the white figures represented in the pictures. The TAQ has been used rather widely as a measure of fear of failure. Its development has been described by Sarason and his colleagues (1960). The projective measures of n Ach and the TAQ are generally regarded as the best validated tests available at the moment.

Treatment Groups

Experimental Groups. Experimental groups met with a counselor, in small subgroups of eight to ten, once a week for a period of one semester (approximately 14 sessions). The meetings with each subgroup were conducted in a manner which provided each student the maximum opportunity to participate as he wished. At the same time, these sessions differed from traditional group counseling since they were highly structured around the concepts outlined in Appendix A.

Counselors were encouraged to use their own styles in orienting the students to the purpose of the group sessions. Nevertheless, certain key ideas were to be communicated. Subjects were informed that they had been chosen because they were judged to have ability to do much better work in school than they were now doing; and that if they wanted to do better work, we thought we knew how to help them. Subjects were assured that participation in the sessions was entirely voluntary on their part. If they did decide to join a group, we promised they would neither be nagged nor scolded for not doing

better work. To our knowledge, no potential subject refused to participate.

As indicated earlier, the content of the Experimental Group sessions centered on the mediator variables as described in Appendix A. The adequacy of the manner with which the variables were dealt will be considered in the Discussion section. The following illustrations, from recordings of the group session, indicate that these variables were discussed.

a. Probability of success:

Student: "... a lot of these white guys go to school and they drop out and yet they still come out successful A Negro guy might go ahead and finish ... but then the white guys end up getting a better job than the Negro boy."; "Colored people don't get a chance at good offices like that; they're always in low offices They don't have a good chance."

b. Internal-External orientation:

"Most of the teachers are prejudiced"; or, "You're born that way."

c. Negro self-concept:

"They think all Negroes are dirty and no good."; or, "Negro(es) can't do good so they do bad."; or, "Everywhere you look there's a Negro in sports.... They can all do things that have to do with their bodies... their minds are not developed."

d. Goals (realism):

"It used to be that boys who quit school, they could go and dig ditches or sweep streets, but now they mostly got machines that do all of that."

e. Parental reinforcement:

"If my mother hounds me most of the time I can probably snap back at her... just trying to help me, but enough is enough."; or, "My father wants me to be a lawyer; my mother wants me to be a pharmacist. They don't want me to be what I want to be."

f. Handling hostility:

"They (Negroes) get mad and just give up."; or, "If they call me a dirty Negro or something like that, I'll go hit them, beat them up..."; or, "Any time they (teachers) say something smart to me, I say something smart back to them...."; or, "If somebody do(es) something to you, you do something to them."

g. Peer group:

"The leaders come out in kindergarten... the ones that fight the best...the ones that everybody likes...they're the bad kinds and are always messing off."; or,

Counselor: "If you become successful as a student, then you have other Negro students who are saying that you're trying to act as though you're white?"

Student: "They call you a gray boy."

h. Successful models:

Counselor: "Do you know a successful Negro, like say a doctor?"

Student: "I think I've seen a colored doctor work in our hospital."

(It should be noted that counselors were selected to provide examples of successful male models who had achieved success through educational endeavors on their part. In addition, a Negro staff member of the Department of Education,

University of California, met with the experimental groups for one session to provide still another male model.)

Control Groups

Control Group I met with a counselor for the same number of sessions as the Experimental Groups. These sessions were quite unstructured; the subjects discussed any topic of interest. As a matter of fact, the counselor for this group was not informed of the nature of activities carried out by the counselors for the Experimental Groups.

Control Group II was identified as the study began but was given no further attention until they were tested in the follow-up procedures.

Post-testing and Follow-up

At the end of the counseling sessions, the subjects in Control Group I and in the Experimental groups were administered the Insight Test, the TAQ, and the questionnaire regarding plans and attitudes toward school. Their grades were obtained from school records. About one year later the same information was obtained from all groups. Also, during the follow-up, teachers were asked to rate the subjects on achievement-related behaviors (see Appendix B).

Subjects

The subjects were all Negro boys in two junior high schools in two school districts located in the San Francisco Bay Area. Originally the research design had specified that subjects would be selected on the basis of scores of

a measure of need achievement administered to an entire junior high school population in one school district. But due to problems involved in attempts of the district to end de facto segregation, we had to move the study to two other districts. By the time negotiations with other districts were completed, it was necessary to forego the testing procedures for entire classes in order to allow a sufficient period of time for the group sessions. The selection procedures were modified so that subjects were screened solely on the basis of teacher and counselor judgement. Teachers and counselors were asked to identify students who appeared to have high academic ability but who were performing at a level which was considered to be below their capabilities. The choice of subjects at the junior high school level represents a compromise between two considerations. At this level students are given feedback on academic performance in terms of grades, thus the underachiever becomes more readily recognizable than in the elementary grades. At the same time it appears likely that because of the age factor, ameliorative procedures are more likely to be successful with junior high school students than later on in the school program. Certainly the sooner the remedial efforts can be initiated the smaller the deficiency in school related skills.

The number of subjects in the various groups were as follows:

Experimental Group	37
Control Group I	9
Control Group II	9

The numbers will vary slightly with various analyses because complete data were not obtained from all subjects. Occasionally they failed to answer certain items or, in some instances, were absent when certain data were collected.

The missing information will be noted when appropriate. With the parametric analytic procedures, missing subjects were arbitrarily assigned a mean value.

Because of the necessity for grouping Ss according to free periods in the class schedules, it was impossible to assign them randomly to the three groups. When the study was initiated we were not aware of any systematic biases introduced as a result of this procedure. However, as will be seen in the presentation of findings, there were systematic group differences in n Ach.

Counselors

The counselors, all males, were from minority backgrounds -- three Negroes and one Mexican-American. All held credentials as counselors in California, and, with one exception, all were employed in the respective schools in which the counseling sessions were conducted. The exception was an employee of the school district in which one of the schools was located.

The decision to use counselors already employed in the schools was rationalized on the basis that if the experimental procedures were to have much value, typical school counselors must be able to adapt them to their own use. In addition, there were several practical advantages in using school employees. For example, the counselors were able to introduce the study to the faculty as routine guidance procedure. The success of the study hinged in part on teachers being unaware of the purpose of the study. Furthermore, less confusion was created than probably would have been the case if new personnel were around the school several hours per week.

Data Analysis

Both parametric and non-parametric analytic procedures were employed. The data from the questionnaire regarding plans and attitudes towards school were examined for general trends. Relevant analysis will be discussed along with the findings.

One of the basic problems in the use of projective measures of the achievement motive is the difficulty in determining the reliability of scoring procedures -- typically inter-scorer agreement. In this instance two scorers attained practically complete agreement with respect to total scores. Differences between the two scorers disagreed primarily in terms of sub-categories. The scores of one scorer, who has rated the protocols of all subjects, were utilized in the data analyses.

RESULTS

As indicated previously, the two basic concerns of the present study were: 1) do the experimental groups show greater improvement in overt academic achievement striving than the control groups; and 2) do the experimental Ss with high achievement motivation respond more favorably to the experimental treatments than the experimental Ss with low achievement motivation. To assess the effects of the experimental treatment, the following data were collected:

1) grade point averages which were obtained three different times; 2) test anxiety which was measured three times; and 3) achievement motive as measured by the French Test of Insight.

The Parametric Analyses of the Experimental Effects

As indicated previously, the Ss involved in the present study were not selected and assigned to the six different counseling groups and to the control groups on a random basis. Each group was restricted to a particular school setting and, from a sampling standpoint, represented a somewhat unique group. This type of sampling precludes a simple one-way analysis of variances. However, statistical control for non-random sampling of the various groups can be provided by analysis of covariance. For G.P.A. and Test Anxiety, respectively, the initial observation for each set was taken as a covariate in order to perform the analyses of covariance on second and third analyses of G.P.A. and Test Anxiety. We assumed that the grading procedures were approximately the same across the schools involved. The results of the analyses of covariance are shown on Table 1.

The treatment effects in terms of G.P.A. and Test Anxiety appear to be insignificant except for one analysis of the second G.P.A. observed in Spring, 1965. According to individual contrasts (Scheffe, 1964), the significant difference among the treatment groups on the second G.P.A. was due to the difference between Counseling Groups I and II, not to differences between treatments. This finding does not support the hypothesized experimental effect. The observed difference in improved academic performance cannot be explained from the present data; it is especially puzzling since both groups had the same counselor.

As previously stated one of the basic assumptions of the study was that subjects high in n Ach as measured by the French Test of Insight would benefit most from the experimental procedures. This is not borne out by the analyses

TABLE 1

Analysis of Covariance:
Adjusted Means, Standard Errors
and F Values for GPA and Test Anxiety

Variable	Statistics	Experimental				Control		t* Values	F** Values
		Counsel. Group I	Counsel. Group II	Counsel. Group III	Counsel. Group IV	Counsel. Group I	Non- Counsel Group II		
	Sample N	10	10	9	8	9	9		
2nd GPA Spring 1965 with 1st GPA Fall as covariate	Treatment Means Adjusted Means Standard Errors	1.90 2.03 .11	1.53 1.43 .11	1.83 1.78 .11	2.13 1.91 .13	1.28 1.61 .11	1.87 1.79 .11		*** 9.15
3rd GPA Spring 1966 with 1st GPA Fall '64 as covariate	Treatment Means Adjusted Means Standard Errors	2.12 2.27 .18	2.05 1.88 .18	1.83 1.76 .18	1.79 1.67 .20	1.39 1.64 .18	2.11 2.05 .17		*** 3.12 4.15 1.94
2nd Test Anxiety Spring 1965 with 1st Test Anxiety Fall 1964 as covariate	Treatment Means Adjusted Means Standard Errors	149.80 156.14 10.96	146.30 144.60 11.09	131.33 123.60 10.98	149.25 147.79 11.60	149.00 143.42 10.77	134.55 144.00 10.92		4.13 .906
	+ 3 missing values were estimated for the experimental groups, thereby d.f. for F decreases to 44.								
3rd Test Anxiety Spring 1966 with 1st Test Anxiety Fall 1964 as covariate	Treatment Means Adjusted Means Standard Errors	147.90 151.35 8.64	133.20 133.60 8.75	144.67 139.31 8.66	166.12 164.03 9.15	149.89 145.40 8.50	125.78 133.21 8.61		4.06 1.57

Note: * t value is associated with $H_0: \beta_0 = 0$, i.e. the overall regression coefficient of the covariate on the variate equals zero in the population.

** F value is associated with $H_0: \mu_{E1} = \mu_{E2} = \mu_{E3} = \mu_{E4} = \mu_{e1} = \mu_{e2}$

. *** $F_{5,47}$ (observed) = 3.12 exceeds $F_{5,47} (.95) = 2.40$.

All the t values exceed $t_{48} (.95) = 2.01$.

presented in Tables 1 and 2. Notice that the analysis shown in Table 2 indicates that there were significant differences in achievement motivation and, as was true in Table 1, the only significant contrast was between Counseling Groups I and II. Contrary to expectations the group with lowest achievement motivation was the only group to show significant improvement in G.P.A. When the four Counseling Groups were pooled and compared with the combined Control Groups, there were no significant experimental effects in terms of the second and third G.P.A. with a co-variate of the first G.P.A. and Test Anxiety, respectively.

The Non-parametric Analyses

Despite the lack of differences among the four Counseling Groups and the two Control Groups on G.P.A. and Test Anxiety, it is possible that meaningful trends could be noted by reducing the sets of continuous variables to bi-nomial observations. We were working with a small sample population, and with criterion variables (e.g. grades) that have been recognized as fairly unreliable estimates of performance. Differences would have to be rather large in order to be considered significant. Therefore, the changes in G.P.A. and Test Anxiety were recorded as either increase (+) or decrease (-) over time. The classification variables constitute a $2 \times 2 \times 2$ factorial format; e.g., (Experimental vs Control) \times (High vs Low) \times (Increase or Decrease in G.P.A.). Altogether, nine chi-square analyses were conducted using the method suggested by Marascuilo (1966) to estimate main and interaction effects by means of such a format. The results are shown in Table 3.

Table 2

Means and Standard Deviations
for Measured Achievement Motives

Group	Experimental				Control	
	Counsel. Group I	Counsel. Group II	Counsel. Group III	Counsel. Group IV	Counsel. Group I	Non- Counsel. Group II
Sample N	10	10	9	8	9+	9+
Means	2.70	6.20	5.00	3.25	4.11	4.44*
S. D.	1.49	2.78	2.29	1.83	1.17	1.51

Note: + The two missing values each for Control Group I and II were estimated, thus d.f. decreases to 45.

* $F_{5,45}$ (0b) = 3.67 exceeds $F_{5,45}$ (.95) = 2.41.

TABLE 3

Data and χ^2 Values Associated with Main and Interaction Effects

		Data				χ^2 Analysis Table			Missing
1st class. (Exp. vs Cont.)	2nd class. (Ach. Motive)	Experimental		Control		Source of Variation	d.f.	Chi-Square	
		High	Low	High	Low				
1) Changes in GPA from Fall '64 to Spring '65	+ -	10 10	9 8	4 5	2 2	Exp. vs Cont. Ach. Motive	1 1	.08225 .10443	
Total Frequency		20	17	9	4	Interaction	1	.00584	
2) Changes in GPA from Spring '65 to Spring '66	+ -	12 8	9 8	8 1	4 0*	Exp. vs Cont. Ach. Motive	1 1	.29093 9.71022*	
Total Frequency		20	17	9	4	Interaction	1	.56976	
3) Changes in GPA from Fall '64 to Spring '66	+ -	13 7	10 7	7 2	2 2	Exp. vs Cont. Ach. Motive	1 1	.73403 .21970	
Total Frequency		20	17	9	4	Interaction	1	.43476	
4) Changes in Test Anxiety from Fall '64 to Spring '65	+ -	5 13	8 9	4 4	1 3	Exp. vs Cont. Ach. Motive	1 1	.33352 .07601	
Total Frequency		18	17	8	4	Interaction	1	1.88675	3
5) Changes in Test Anxiety from Spring '65 to Spring '66	+ -	10 9	6 10	4 4	1 3	Exp. vs Cont. Ach. Motive	1 1	1.37713 .05991	
Total Frequency		19	16	8	4	Interaction	1	.09196	3
6) Changes in Test Anxiety from Fall '64 to Spring '66	+ -	7 12	6 11	5 3	1 3	Exp. vs Cont. Ach. Motive	1 1	.62583 .70810	
Total Frequency		19	17	8	4	Interaction	1	1.26904	2
7) Changes in GPA from Fall '64 to Spring '65	+ -	14 12	6 6	7 5	4 2	Exp. vs Cont. Test Anxiety	1 1	.00042 .36381	
Total Frequency		26	12	12	6	Interaction	1	.16918	3
8) Changes in GPA from Spring '65 to Spring '66	+ -	14 6	9 7	8 3	6 1	Exp. vs Cont. Test Anxiety	1 1	.20009 1.20482	
Total Frequency		20	16	11	7	Interaction	1	1.16418	5
9) Changes in GPA from Fall '64 to Spring '66	+ -	17 6	6 7	5 5	6 2	Exp. vs Cont. Test Anxiety	1 1	.49306 .03934	
Total Frequency		23	13	10	8	Interaction	1	3.66554**	5

* The observed $\chi^2 = 9.71$ exceeds $\chi^2_{.95} (.95) = 3.84$. However this value seems spurious, because of the 0 frequency in one of the cells in the data.

** The observed $\chi^2 = 3.67$ approaches nearly $\chi^2_{.95} (.95) = 3.84$, but exceeding $\chi^2_{.90} = 2.71$.

All the analyses except for the second and ninth turned out to yield insignificant χ^2 values. Note that the significant value in the second analysis is associated with main effects due to the experimental treatments and achievement motives. Because of the 0 frequency in one of the cells, however, the χ^2 value (9.7) is probably spuriously high. Thus we are inclined to ignore this finding. It is interesting to note that the interaction between the experimental treatments and the measured test anxiety (.10 > P > .05) was almost significant. With a one-tailed test, this chi-square would be considered significant. There is a tendency for students under the experimental treatment, whose test anxiety scores decrease, to show improvement in G.P.A. during the period from Fall, 1964, to Spring, 1966. On the other hand, about an equal number of control subjects whose anxiety scores decreased, either decreased or improved in G.P.A. during the same period; those control subjects whose test anxiety scores increased tended to improve slightly in academic performance.

Although the overall χ^2 's in Table 3 were not significant, with the exceptions previously noted, it is interesting to note that six of the nine analyses of changes in G.P.A. and TAQ scores for high n Ach experimental subjects were in the expected direction. Also the trends appear to be most pronounced with changes occurring over the two year period. However, in most instances, similar trends were noted for low n Ach subjects and for controls. This could mean that counseling, regardless of orientation, has an increasing impact over time -- an impact which our evaluative procedures were not sufficiently sensitive to detect. As a check on this possibility, the data concerning G.P.A. were reanalyzed with three criterion groups: experimental; counseled controls; and, non-counseled controls. The findings are shown in Table 4.

TABLE 4

 χ^2 Analyses of Changes in GPA of Experimental,
 Counseled-Control and Non-Counseled Control Groups

Group		Experi- mental	Counseled	Non- Counseled	Total	χ^2 Values	Missing GPA
1) Changes in GPA from Fall '64 to Spring '65	+	19	6	4	29	.47	2 Exper. 1 Non-Counsel.
	-	18	4	5	27		
		37	10	9*	56		
2) Changes in GPA from Spring '65 to Spring '66	+	21	8	7	36	2.70	2 Exper. 1 Non-Counsel.
	-	16	2	2	20		
		37	10	9	56		
3) Changes in GPA from Fall '64 to Spring '66	+	23	7	5	35	.43	2 Exper. 1 Non-Counsel.
	-	14	3	4	21		
		37	10	9	56		

* There are three GPA values which are not shown. The missing GPA values represent two subjects in the Experimental Group and one subject in the Non-Counseled Control Group. There is a discrepancy between the number of Ss in the control in Table 3 ($N = 13$) and in the counseled plus non-counseled control in Table 4 ($N = 19$). Six cases were dropped out of Table 3 by ignoring the measure of n Ach as a classification variable. These cases were included in Table 4, accounting for the difference. None of the χ^2 values exceeds $\chi^2_2 (.95) = 5.991$.

Note that the trends are quite similar for all groups. Thus we are unable to determine how much, if any, of the observed changes were related to the experimental procedures.

School Behavior Rated by Teachers

In May, 1966, each subject was rated by his teachers with regard to 17 different traits deemed indicative of achievement-related behavior. Each trait was rated on a three-point scale. A trait checked "sometimes or rarely" was assigned a score of 1; "frequently", a score of 2; and, "nearly always", 3. Approximately five ratings were obtained for each subject. These ratings were averaged to obtain a single score. We assumed that the criteria of ratings were similar across the different treatment groups and the ratings were pooled within the experimental and control groups, respectively, in order to obtain means for each trait.

Comparisons between experimental and control groups are shown in Table 5. All of the differences between mean ratings for the experimental and control students with respect to the 17 traits were insignificant. It is of interest to note that teachers perceived both experimental and control subjects as generally courteous to teachers and school authorities and as popular with their peers. However, teachers thought both groups of subjects were deficient in behaviors which might be expected to result in relatively high academic performance. For example, subjects were unlikely to ask teachers for academic assistance or to provide such assistance to one another.

TABLE 5

Teachers' Mean Ratings on
Student School Behavior

	Experimental (N=39)		Control (N=20)		Difference
	Mean	S.D.	Mean	S.D.	
1. Prompt in handing in assignments	1.84	.50	1.79	.66	.05
2. Courteous to teachers and school authorities	2.36	.45	2.24	.59	.12
3. Popular with his peers	2.21	.47	2.12	.49	.09
4. Regarded as a leader by his peers	1.46	.49	1.41	.46	.05
5. Works hard to get good grades	1.65	.48	1.55	.53	.10
6. Volunteers for class responsibilities	1.40	.40	1.48	.61	-.08
7. Initiates out-of-class activities	1.14	.30	1.20	.37	-.06
8. Works at or near his intellectual capacity	1.65	.38	1.58	.51	.07
9. Fights and/or uses abusive language	1.07	.15	1.17	.28	-.10
10. Takes his books home with him so that he can complete homework assignments	1.58	.52	1.48	.66	.10
11. Active in extra-curricular activities such as clubs	1.30	.44	1.19	.38	.11
12. Active in sports	1.85	.73	1.56	.58	.29
13. Completes school assignments without assistance from his peers	1.92	.51	1.76	.58	.16
14. Seeks special help from teachers	1.23	.23	1.29	.34	-.06
15. Helps his friends do better work	1.26	.32	1.21	.39	.05
16. Avoids tasks because he fears failing	1.28	.31	1.44	.67	.16
17. "Sensitive" about real or imagined attacks on his person	1.41	.49	1.44	.47	.03

Self-Reported Attitudes Toward Achievement-Related Variables

On three separate occasions a questionnaire was used to ask subjects about topics such as their relationships with peers, and with teachers and parents, use of leisure time, attitudes toward school, and future plans. The tabulation of their responses is shown in Table 6. Because of the small N's in the control groups, no meaningful comparisons can be made of responses given by those in control groups and by those in experimental groups. Perhaps the most meaningful comparisons would be among the three sets of responses of the experimental subjects. In order to conserve space, the initial responses of Control Group I have been omitted from Table 6.

In general, the responses of the experimental subjects were quite stable over the period of one and one-half years. With some minor exceptions, there appeared to be little change in achievement-related attitudes. These exceptions involve a tendency to decrease in time spent with movies and television and to place less emphasis on "sharp" clothes and on being a good fighter as a means of gaining peer approval. In addition, a smaller number of boys indicated job preferences at the professional and managerial level. At the same time, there was a tendency to express increasing concern about parental disapproval and a desire to please the parents. Finally, there was a tendency which increased over the two year period for the boys to perceive teachers as being friendly toward them and to consider friendliness as a means of gaining peer approval. Controls were more likely to regard teachers as adults who were disinterested in teen-agers.

These trends could be regarded as a change in attitudes which should lead, over the long haul, to improved academic performance. Otherwise,

TABLE 6

Students' Self-Reported Attitude Toward School
Proportions of Alternative Responses in Spring 1965 and Spring 1966

	First Experi- mental	2nd Spring 1965		3rd Spring 1966	
		Experi- mental	Control II	Experi- mental	Control I, II
1. If school were not compulsory, and it were completely up to you, would you...					
1) Stay in school until graduation	.765(26)	.784(29)	.143(1)	.722(26)	.750(12)
2) Leave school before graduating		.054(2)	.857(6)	.028(1)	
3) Don't know		.135(5)		.194(7)	
Uncertain		.027(1)		.056(2)	
2. What would you most like to get from high school?					
1) Education - College	.735(25)	.648(24)	.286(2)	.750(27)	.938(15)
2) Occupation	.235(8)	.189(7)	.286(2)	.222(8)	.375(6)
3) Financial	.029(1)	.081(3)	.143(1)	.056(2)	.125(2)
4) Sport	.176(6)	.054(2)			.125(2)
5) Social, pleasure	.059(2)	.027(1)		.028(1)	
6) Endurance, diploma	.147(5)	.135(5)	.429(3)	.250(9)	.125(2)
Uncertain	(1)				
3. How much time, on the average do you spend doing homework outside school?					
1) None, or almost none	.147(5)	.216(8)	.286(2)	.139(5)	.250(4)
2) Less than 1/2 hour a day	.059(2)	.135(5)	.286(2)	.222(8)	.125(2)
3) About 1/2 hour a day	.118(4)	.108(4)		.139(5)	.063(1)
4) About 1 hour a day	.206(7)	.270(10)	.286(2)	.167(6)	.125(2)
5) About 1 - 1 1/2 hours a day	.206(7)	.135(5)	.143(1)	.111(4)	.375(6)
6) About 2 hours a day	.118(4)	.135(5)		.184(7)	
7) 3 or more hours a day	.059(2)			.027(1)	.063(1)
Uncertain	(3)				
4. How would you use an extra hour?					
1) Course	.088(3)	.162(6)		.167(6)	.125(2)
2) Athletics	.471(16)	.486(18)	.714(5)	.444(16)	.563(9)
3) Club or activity	.029(1)	.027(1)	.143(1)	.111(4)	.063(1)
4) Study hall, to study	.265(9)	.243(9)		.194(7)	.250(4)
5) Study hall, to do something else	.088(3)	.081(3)		.056(2)	
Uncertain	(2)		.143(1)	.028(1)	
5. About how many evenings a week do you spend out with other fellows?					
1) 0 - 1	.353(12)	.081(3)		.111(4)	.125(2)
2) 2 - 3	.176(6)	.324(12)	.286(2)	.333(12)	.438(7)
3) 4 - 5	.352(12)	.297(11)	.286(2)	.305(11)	.188(3)
4) 6 - 7	.352(12)	.216(8)	.429(3)	.194(7)	.125(2)
Uncertain	.118(4)	.081(3)		.056(2)	.125(2)

Table 5 - continued

6. About how many evenings a week do you spend at home?					
1) 0 - 1		.081(3)	.143(1)	.028(1)	.125(2)
2) 2 - 3	.264(9)	.324(12)		.333(12)	.063(1)
3) 4 - 5	.500(17)	.189(7)	.286(2)	.278(10)	.375(6)
4) 6 - 7	.176(6)	.297(11)	.429(3)	.278(10)	.313(5)
Uncertain	.059(2)	.108(4)	.143(1)	.083(3)	.125(2)
7. How often do you go to the movies?					
1) Never, or almost never	.088(3)	.270(10)	.286(2)	.389(14)	.250(4)
2) About once a month or less	.353(12)	.297(11)	.143(1)	.417(15)	.375(6)
3) About once every two or three weeks	.382(13)	.243(9)	.286(2)	.194(7)	.313(5)
4) About once a week	.147(5)	.189(7)	.143(1)		.063(1)
5) About twice a week					
6) More than twice a week			.143(1)		
Uncertain	.029(1)				
8. With whom do you go most often?					
1) By myself	.088(3)	.108(4)		.056(2)	
2) With a date	.088(3)	.135(5)		.194(7)	.313(5)
3) With other fellows	.353(12)	.378(14)	.429(3)	.444(16)	.250(4)
4) With a group of boys and girls	.324(11)	.216(8)	.571(4)	.139(5)	.375(6)
5) With members of my family	.088(3)	.108(4)		.111(4)	
Uncertain	.059(2)	.054(2)		.056(2)	.063(1)
9. About how much time, on the average, do you spend watching TV on a weekday?					
1) None, or almost none	.059(2)	.027(1)	.143(1)	.028(1)	.063(1)
2) About 1/2 hour a day		.027(1)	.143(1)	.083(3)	.063(1)
3) About 1 hour a day	.029(1)	.054(2)		.056(2)	.125(2)
4) About 1 - 1 1/2 hours a day	.059(2)	.054(2)		.083(3)	.063(1)
5) About 2 hours a day	.118(4)	.162(6)	.286(2)	.194(7)	.250(4)
6) About 3 hours a day	.088(3)	.216(8)		.222(8)	.313(5)
7) About 4 or more hours a day	.588(20)	.459(17)	.429(3)	.333(12)	.125(2)
Uncertain	.059(2)				
10. Among the things you work for during your school days, which is the most important to you?					
1) Pleasing my parents	.265(9)	.378(14)	.286(2)	.417(15)	.313(5)
2) Learning as much as possible in school	.382(13)	.243(9)	.286(2)	.278(10)	.500(8)
3) Living up to my religious ideals	.059(1)	.108(4)		.056(2)	
4) Being accepted and liked by other students	.059(1)	.081(3)	.286(2)	.111(4)	.125(2)
Uncertain	.294(10)	.189(7)	.143(1)	.139(5)	.063(1)

Table 5 - continued

11. Check each item that your parents have definite rules for.					
1) Time for being in at night on weekends	.500(17)	.567(21)	.571(4)	.666(24)	.438(7)
2) Amount of dating	.059(2)	.054(2)	.143(1)	.028(1)	.125(2)
3) Against going steady	.029(1)	.054(2)			.125(2)
4) Time spent watching TV	.147(5)	.297(11)	.143(1)	.111(4)	.125(2)
5) Time spent on homework	.382(13)	.432(16)	.429(3)	.250(9)	.313(5)
6) Against going around with certain boys or girls	.588(20)	.648(24)	.429(3)	.695(25)	.563(9)
7) Eating dinner with the family	.294(10)	.297(11)		.361(13)	.250(4)
8) No rules for any of the above items	.206(7)	.108(4)		.167(6)	.250(4)
12. Which of the things below are important to do in order to be popular in the group?					
1) Be a good dancer	.412(14)	.297(11)	.571(4)	.333(12)	.500(8)
2) Have sharp clothes	.588(20)	.297(11)	.714(5)	.250(9)	.750(12)
3) Have a good reputation	.382(13)	.567(21)	.286(2)	.444(16)	.250(4)
4) Stirring up a little excitement	.206(7)	.187(7)	.714(5)	.361(13)	.188(3)
5) Have money	.265(9)	.187(7)	.857(6)	.222(8)	.563(9)
6) Smoking	.147(5)	.054(2)	.429(3)	.028(1)	.125(2)
7) Being a good fighter	.324(11)	.216(8)	.857(6)	.111(4)	.375(6)
8) Being up on cars	.059(2)	.081(3)	.286(2)	.083(3)	.063(1)
9) Know what's going on in the world of popular singers and movie stars	.176(6)	.162(6)	.571(4)	.305(11)	.313(5)
13. how far out from the center of activities at school are you?					
1) 1.	.147(5)	.135(5)		.056(2)	.250(4)
2) 2.	.088(3)	.162(6)	.143(1)	.139(5)	.188(3)
3) 3.	.500(17)	.270(10)	.286(2)	.389(14)	.250(4)
4) 4.	.176(6)	.189(7)		.194(7)	.188(3)
5) 5.	.059(2)	.162(6)	.429(3)	.222(8)	.063(1)
Uncertain	.029(1)	.081(3)	.143(1)		.063(1)
14. Now, how close would you like to be?					
1) 1.	.382(13)	.405(15)	.571(4)	.333(12)	.375(6)
2) 2.	.176(6)	.108(4)		.194(7)	.063(1)
3) 3.	.235(8)	.162(6)	.143(1)	.222(8)	.250(4)
4) 4.	.088(3)	.135(5)		.083(3)	.188(3)
5) 5.	.059(2)	.081(3)	.143(1)	.167(6)	.063(1)
Uncertain	.059(2)	.108(4)	.143(1)		.063(1)
15. Would you say you are a part of the leading crowd?					
1) Yes	.412(14)	.540(20)	.571(4)	.472(17)	.438(7)
2) No	.559(19)	.405(15)	.429(3)	.472(17)	.438(7)
Uncertain	.029(1)	.054(2)		.056(2)	.125(2)

Table 5 - continued

16. If no, would you like to be a part of the leading crowd?					
1) Yes	.118(4)	.135(5)		.056(2)	.125(2)
2) No	.176(6)	.135(5)	.286(2)	.139(5)	.063(1)
3) Don't care	.529(18)	.513(19)	.286(2)	.555(20)	.563(9)
Uncertain	.176(6)	.216(8)	.429(3)	.250(9)	.250(4)
17. How much formal education did your father have?					
1) Some grade school	.059(2)	.027(1)		.111(4)	
2) Finished grade school	.059(2)	.054(2)	.286(2)	.056(2)	.063(1)
3) Some high school	.206(7)	.243(9)		.167(6)	.375(6)
4) Finished high school	.235(8)	.270(10)		.278(10)	.188(3)
5) Some college	.088(3)	.108(4)		.167(6)	
6) Finished college	.147(5)	.108(4)	.143(1)	.056(2)	.125(2)
7) Attended graduate school or professional school after college	.088(3)	.081(3)	.143(1)	.028(1)	
8) Don't know	.118(4)	.081(3)	.286(2)	.111(4)	.188(3)
Uncertain		.027(1)	.143(1)	.028(1)	.063(1)
18. How much formal education did your mother have?					
1) Some grade school		.027(1)			
2) Finished grade school				.056(2)	
3) Some high school	.088(7)	.216(8)	.286(2)	.222(8)	.250(4)
4) Finished high school	.235(8)	.216(8)	.286(2)	.305(11)	.375(6)
5) Some college	.294(10)	.189(7)		.222(8)	
6) Finished college	.059(2)	.162(6)		.056(2)	.188(3)
7) Attended graduate school or professional school after college	.059(2)	.027(1)	.143(1)	.028(1)	.063(1)
8) Don't know	.088(3)	.135(5)	.143(1)	.083(3)	.125(2)
Uncertain	.059(2)	.027(1)	.143(1)	.028(1)	
19. Your father's occupation?					
1) Professional, technical and managerial occupations	.058(2)	.081(3)		.111(4)	
2) Clerical and sales occupations					.063(1)
3) Service occupations	.147(5)	.162(6)	.143(1)	.139(5)	.188(3)
4) Farming, fishery, forestry and related occupations					
5) Processing occupations	.029(1)				
6) Machines trades occupations	.147(5)	.108(4)	.143(1)	.167(6)	.063(1)
7) Bench work occupations	.118(4)	.108(4)		.111(4)	.063(1)
8) Structural work occupations	.059(2)	.054(2)		.056(2)	.125(2)
9) Miscellaneous occupations	.235(8)	.243(9)	.286(2)	.194(7)	.250(4)
Uncertain	.088(3)	.081(3)		.111(4)	.125(2)
20. Does your mother have a job outside the home?					
1) Yes, full time	.441(15)	.351(13)	.286(2)	.389(14)	.250(4)
2) Yes, part time	.353(12)	.378(14)	.429(3)	.361(13)	.250(4)
3) No	.206(7)	.189(7)	.143(1)	.222(8)	.500(8)
Uncertain		.081(3)	.143(1)	.028(1)	

Table 5 - continued

21. How often do you attend church?					
1) Every week	.471(16)	.378(14)	.571(4)	.250(9)	.250(4)
2) 1 to 3 times a month	.265(9)	.270(10)	.143(1)	.333(12)	.313(5)
3) Less than once a month	.235(8)	.297(11)		.389(14)	.438(7)
Uncertain	.029(1)	.054(2)	.286(2)	.028(1)	
22. If you could have any job you wanted, what would you most want to be?					
1) Professional, technical and managerial occupations	.618(21)	.459(19)	.429(3)	.250(9)	.750(12)
2) Clerical and sales occupations	.088(3)	.054(2)	.143(1)		
3) Service occupations				.083(3)	
4) Farming, fishery, forestry and related occupations					
5) Processing occupations					
6) Machines trades occupations	.059(2)	.054(2)		.111(4)	
7) Bench work occupations				.028(1)	
8) Structural work occupations	.235(1)	.027(1)		.056(2)	
9) Miscellaneous occupations	.235(1)	.027(1)	.143(1)	.028(1)	.063(1)
Uncertain	.176(6)	.189(7)		.222(8)	.125(2)
23. Do you think you will probably live in this town when you are out of school and have a job?					
1) Definitely yes	.029(1)	.054(2)			
2) Probably yes	.176(6)	.162(6)		.167(6)	.063(1)
3) Don't know	.088(9)	.378(14)	.286(2)	.417(15)	.188(3)
4) Probably no	.235(8)	.216(8)	.143(1)	.194(7)	.313(5)
5) Definitely no	.235(8)	.135(5)	.286(2)	.194(7)	.375(6)
Uncertain	.059(2)	.054(2)	.286(2)	.056(1)	.063(1)
24. What kind of work do you plan to go into?					
1) Professional, technical and managerial occupations	.411(16)	.486(18)	.286(2)	.361(13)	.313(5)
2) Clerical and sales occupations	.088(3)	.108(4)	.143(1)	.028(1)	
3) Service occupations				.056(2)	.063(1)
4) Farming, fishery, forestry and related occupations					
5) Processing occupations					
6) Machines trades occupations	.029(1)	.054(2)		.028(1)	
7) Bench work occupations					
8) Structural work occupations		.054(2)		.056(2)	
9) Miscellaneous occupations	.029(1)			.028(1)	
Uncertain	.382(13)	.297(11)	.571(4)	.444(16)	.625(10)
25. Are you planning to go to college after high school?					
1) Yes	.765(26)	.676(25)	.143(1)	.694(25)	.563(9)
2) Undecided	.118(4)	.243(9)	.429(3)	.278(10)	.313(5)
3) No	.029(1)				
4) Have not thought about it	.088(3)	.054(2)	.143(1)		.125(2)
Uncertain		.027(1)	.286(2)	.028(1)	

Table 5 - continued

26. If you could be remembered here at school for one of the things below which one would you want it to be?					
1) Outstanding student	.324(11)	.459(17)	.571(4)	.417(15)	.188(3)
2) Athletic star	.324(11)	.270(10)	.108(4)	.361(13)	.375(6)
3) Most popular	.206(7)	.143(1)	.286(2)	.083(3)	.250(4)
Uncertain	.147(5)	.162(6)	.286(2)	.139(5)	.188(3)
27. Which of these things would be hardest for you to take?					
1) Parents' disapproval	.441(15)	.676(25)	.571(4)	.833(30)	.563(9)
2) Teacher's disapproval	.147(5)	.054(2)	.143(1)	.028(1)	.028(1)
3) Breaking with friend	.235(8)	.108(4)	.286(2)	.313(5)	.313(5)
Uncertain	.206(7)	.162(6)	.286(2)	.111(4)	.125(2)
28. Do you belong to any clubs or groups outside of school?					
1) Yes	.676(23)	.540(20)	.429(3)	.694(25)	.375(6)
2) No	.324(11)	.432(16)	.286(2)	.278(10)	.563(9)
Uncertain	.027(1)	.286(2)	.028(1)	.063(1)	.063(1)
29. Which of the items below fit most of the boys here at school?					
1) Friendly	.382(13)	.405(15)	.429(3)	.528(19)	.500(8)
2) Not interested in school	.294(10)	.162(6)	.143(1)	.250(9)	.313(5)
3) Hard to get to know	.088(3)	.027(1)	.286(2)	.222(8)	.313(5)
4) Crazy about cars	.176(6)	.189(7)	.286(2)	.194(7)	.125(2)
5) Active around school	.294(10)	.297(11)	.429(3)	.500(18)	.813(13)
6) Girl-crazy	.382(13)	.432(16)	.286(2)	.611(22)	.563(9)
7) Studious	.088(3)	.027(1)	.286(2)	.438(7)	.438(7)
8) Out for a good time	.500(17)	.378(14)	.429(3)	.361(13)	.313(5)
9) Sports-minded	.500(17)	.648(24)	.429(3)	.583(21)	.688(11)
30. Which of the items below fit most of the teachers here at school?					
1) Friendly	.529(18)	.432(16)	.286(2)	.639(23)	.313(5)
2) Too strict	.500(17)	.378(14)	.571(4)	.278(10)	.125(2)
3) Too easy with school work	.118(4)	.054(2)	.286(2)	.083(3)	.125(2)
4) Understand problems of teen-agers	.294(10)	.216(8)	.429(3)	.361(13)	.188(3)
5) Not interested in teen-agers	.294(10)	.270(10)	.286(2)	.250(9)	.438(7)
6) Willing to help out in activities	.382(13)	.270(10)	.286(2)	.361(13)	.313(5)
31. Among the items below, what does it take to get to be important and looked up to by the other fellows here at school?					
1) Coming from the right family	.294(10)	.189(7)	.143(1)	.222(8)	.125(2)
2) Leaders in activities	.294(10)	.270(10)	.286(2)	.250(9)	.125(2)
3) Having a neat appearance	.324(11)	.378(14)	.429(3)	.333(12)	.438(7)
4) High grades, honor roll	.176(6)	.189(7)	.286(2)	.222(8)	.250(4)
5) Being an athletic star	.500(17)	.513(19)	.143(1)	.472(17)	.563(9)
6) Being in the right crowd	.471(16)	.297(11)	.286(2)	.472(17)	.438(7)

there is little in the data in Table 6 to suggest that the experimental procedures had an appreciable impact on achievement-related behaviors.

Impressions of Counselors and Administrators

At the end of the experimental sessions, there was a general impression on the part of school administrators and participating counselors that the experimental subjects expressed a much more positive attitude toward themselves and toward school than when the study began. As one principal put it, "I don't know whether or not their grades will improve, but these boys stand a foot taller." During the subsequent year, however, one counselor felt that the subjects has tended to regress toward their former status.

DISCUSSION

The findings of the study offer little evidence to demonstrate the superiority of the experimental procedures over the control conditions. We still believe, however, that the variables used in this study are ones which must be dealt with, if disadvantaged youth are to become better academic achievers. This belief is borne out in part by the content of the interviews. For example, the subjects were angry and were, for the most part, expressing their hostility in self-defeating ways - through fighting, disrespect and withdrawal. They were quite pessimistic about their chances of succeeding in an educational setting. Subjects had few, if any, visible male role models who had achieved through education, and who had any demonstrable impact on the lives of the boys.

If the proper variables were employed, why then were more positive results not obtained? Experience in this pilot study suggested several conditions or problems which may have militated against our observing expected differences between experimentals and controls.

The first problem is the appropriateness of the instruments used in the study when applied to Negro subjects. There is a great deal of literature concerning the low performance of Negro youth on achievement and ability tests. For this reason, we used teacher and counselor judgements about the subjects' potential. This procedure did not provide us with a means for checking the validity of these judgements or with a method to use intelligence level as a control variable in the data analyses. Of more concern for this study, perhaps, was the difficulty in determining the impact of ethnic background on measures of the achievement motive. We have previously alluded to a possible difficulty with the nature of the pictures in the Atkinson-McClelland Scales.

One type of evidence which may bear on the question of the adequacy of the Test of Insight for use with the subjects in this study, is a comparison of their scores with other published norms. Their scores ranged from 0 - 9 with a median of approximately 3.5. French (in Atkinson, 1958) reported a median of 4.5 for 90 officer candidates in an Air Force School - the range was 0 - 12. McSweeney (1962), on the other hand, reported mean scores in excess of 20 for groups of high ability boys similar in age to the subjects of this study. Comparisons such as these must be regarded as highly tenuous since scoring standards vary from investigator to investigator.

Even though scores of this study sample were similar to those reported by French, the poverty of the subjects' responses - often just a word or phrase - would necessarily result in low scores since the responses could not be scored for the sub-categories. There is no way to determine whether a low score for a non-verbal subject represents low motivation or inability to write a story to a stimulus. The troublesome problem of ethnic, and indeed sex biases, in response to different types of tests has been with us since the beginning of the measurement movement. Until these problems are resolved, findings of studies such as this one will continue to be somewhat ambiguous.

A second condition which probably accounts in a large measure for the failure to attain expected differences was the limited ability of the counselors to deal effectively with the experimental variables. For many practical reasons the use of counselors already employed in the schools seemed appropriate. Arranging meetings with the subjects during a free period was quite easy for counselors who were already on the job. Also it seemed quite natural for the groups to be called together by the regular counselors since they were already involved with the students in other contexts. It will be recalled that the

teachers were not informed about the nature of the project. In addition, if the study had proved to be successful, school counselors would then need to be able to adapt the experimental procedures for their own use. Hindsight indicates that the heavy weight given these practical concerns was probably an error on our part. After listening to recordings of interviews, it is apparent that the counselors needed a great deal of assistance in carrying out the experimental procedures even though they did grasp the general nature of the experimental variables.

In planning future studies of this type, we will supply counselors with "canned" materials consisting of detailed outlines, suggested activities, and supportive materials to be used in the group sessions. The need for carefully prepared materials is further indicated by counselors and teachers who encountered difficulties when attempting to translate the abstract theoretical study variables into practical counseling and instructional procedures.

A possible error in strategy which is characteristic of most research design and practice in the guidance area may provide a third explanation for the inconclusive results in this study; namely, lack of follow through with subjects. It has been assumed generally that by helping students gain self-insight and an understanding of their world through counseling interviews, they will be more purposeful and effective in making life plans. But is self-insight and knowledge about one's world enough to enable the student to function effectively in an educational setting, especially for the disadvantaged who must overcome years of adverse social conditioning? Although a student may understand the source of his anger and may be fully aware of the consequence of avert aggression in the classroom for example, he still strikes out in self defeating

ways when he is angry. Beyond the counseling interviews which deal primarily with attitude and abstract strategies for reaching goals, the subject may need a considerable amount of intense supervision as he struggles to develop achievement related skills. He probably needs feed back about his errors and successes. Undoubtedly, he will need tutorial assistance to overcome deficits in subject matter areas before he can achieve academically at a level commensurate with his ability.

The follow through suggested above may be extremely costly in terms of professional manpower and financial resources. Social workers have reported that it is frequently necessary to spend months with an adult from the ghetto before he is able to manage a job on his own. The social worker may need to awaken the individual and stay with him while he is at work. Some Job Corps centers are providing counseling services with a ratio of approximately three counselors for every 50 corpsmen. It is possible that similar intensive assistance in the school environment may be necessary for youth from disadvantaged backgrounds.

A fourth concern is that studies to improve the academic performance of disadvantaged youth, including this one, may be introduced too late in the school program to be maximally effective unless society is willing to provide the type of intensive assistance suggested in the previous paragraphs. If motivational and learning problems of the disadvantaged could be dealt with in the early grades, perhaps such intensive care would be unnecessary. Our classroom observations indicate that many school practices tend to reinforce the negative attitudes which the ghetto child brings with him. As an example, one first grade teacher was noted to begin each unit of work with the statement,

"I am going to present this material, but I know you won't understand it."

Consider the negative impact of such a statement on a Negro male child who has never observed an adult male Negro who has achieved success through educational endeavor. The child may already believe that his probability of success in education is very low; such reinforcement may clinch it for him.

In planning future studies of the effectiveness of counseling procedures with disadvantaged youth, we shall give careful consideration to the possibility of experimenting with earlier grades. If a future study is carried out in the primary grades, greater attention will be devoted to the climate of the classroom and to parental reinforcement of the goals the study is designed to achieve.

Another difficulty is finding an explanation for the general improvement on the criterion variables achieved by both counseled and non-counseled control groups. There is abundant evidence to suggest that the "Hawthorne" or placebo effect of special attention should have resulted in some improvement for the experimental and counseled control subjects. But why did the non-counseled group improve? They were unaware that they were included in the study. Failure to obtain more clear cut differences between counseled and non-counseled subjects may be related to current pervasive changes in our society. For example, the so called "Negro Revolution" may have increased these boys' perceptions of their probabilities of succeeding in an educational institution - thus the improvement in grades. General attempts to improve the status of Negroes in our society may have made available to these subjects resources of which we were unaware. Still another possibility is that national interest in the problems of the disadvantaged has increased teacher awareness of and sensitivity to the problems of these ghetto boys. Changes in teacher sensitivity

coulⁿ be reflected in more teacher assistance to the students thus enabling them to earn higher grades, or in more lenient grading procedures. To the extent that any or all of these possibilities may have affected the results of the study, the differences would have to be quite striking in order to be detected.

A final concern is the possibility that the procedures employed in this study may be more effective with individuals who do not need help nearly as much as did the subjects in the study. Kolb (1965), for example, found that attempts to teach the achievement motive were much more effective with middle class subjects than with those lower status backgrounds. If we can generalize from Kolb's findings, perhaps substantial improvement in academic performance with subjects such as those used in this study should not be expected.

This study has been of value to the investigators in a number of ways despite the lack of definitive results. As suggested earlier, the data collected here have confirmed the importance of the study variables in the lives of these youth. This finding will be important in designing future studies. Already we are trying out, on a limited basis, modifications of the procedures with disadvantaged youth from various ethnic backgrounds.

The study has furnished us with valuable materials for use in a counselor education program. Tapes collected during the group sessions have been used widely with various classes as a means of orienting future counselors to the problems of the ghetto child and to the way in which he perceives his world. The procedures and variables used in the group sessions provide a framework which allows the counselor to approach the disadvantaged without the usual defensiveness. Furthermore, focusing on the study variables opens communication bridges which are essential to understanding between counselors and these youth.

BIBLIOGRAPHY

- Atkinson, J. W. (Ed.). Motives in Fantasy, Action and Society. Princeton: Van Nostrand, 1958.
- Conant, J. B. Cities and Suburbs. New York: McGraw-Hill, 1961.
- Dickenson, W. A., and Truax, C. B. Group counseling with college under-achievers. The Personnel and Guidance Journal. 1966, 45, pp 243-247.
- Editorial. Business Week. August 11, 1962, pp 50-52.
- Fein, R. An economic and social profile of the Negro American. Daedalus. 1965, Fall, pp 815-846.
- French, E. C. Development of a measure of complex motivation. In J. W. Atkinson, (Ed.), Motives in Fantasy, Action and Society. Princeton: Van Nostrand, 1958, pp 242-248.
- Kolb, D. A. Achievement motivation training for underachieving boys. Journal of Personality and Social Psychology. 1965, 2, pp 783-792.
- Lord, F. M. Elementary models for measuring change. In C. Harris, (et. al.), Problems in Measuring Change. Madison: University of Wisconsin Press, 1963, pp 21-38.
- Marascuilo, L. Large-sample multiple comparisons. Psychological Bulletin. 1966, 65, pp 280-296.
- McClelland, D. C. Toward a theory of motive acquisition. American Psychologist. 1965, 20, pp 321-333.
- McClelland, D. C., Atkinson, J. W., Clark, R. A., and Lowell, E. L. The Achievement Motive. New York: Appleton-Century-Crofts, 1953.
- McSweeney, T. D. Changes in achievement motivation of academically talented students after counseling as to academic ability. Unpublished doctoral dissertation, University of California, Berkeley, 1962.
- Sarason, S. B., Davidson, K. S., Lighthall, F. F., Waite, R. R. and Ruebush, B. K. Anxiety in Elementary School Children. New York: John Wiley, 1960.
- Scheffe, H. The Analysis of Variance. New York: John Wiley, 1959, pp 66-72.

Tyler, L. E. The Work of the Counselor. New York: Appleton-Century-Crofts, 1961.

Winer, B. J. Statistical Principles in Experimental Design. New York: McGraw-Hill, 1962, pp 478-621.

Winterbottom, M. R. The relation of need for achievement to learning experiences in independence and mastery. In J. W. Atkinson, (Ed.), Motives in Fantasy, Action and Society. Princeton: Van Nostrand, 1958, pp 453-478.

Appendix A

ANTECEDENT AND CORRELATES OF ACHIEVEMENT STRIVINGS

Robert W Moulton
and
Lawrence H. Stewart

University of California
School of Education

INTRODUCTION

As set forth in this paper, we wish to instigate a long range program of research designed to investigate factors directly related to educational achievement and indirectly to socio-economic mobility among economically disadvantaged youth. As a means of identifying relevant variables for investigation, we have examined a number of general theories concerning personality characteristics which are related to achievement strivings and the socialization processes by which such characteristics are acquired. In this paper these relevant variables are discussed along with our speculations about the relationship of these variables to overt academic achievement. This paper, which represents our thinking on the basis of evidence available to this time, will serve as a rationale for planning a number of specific research projects.

We plan to focus our initial efforts on the American Negro, but it should be pointed out that the variables being considered have general theoretical relevance to achievement behaviors for any sub-cultural group -- the underachiever, the Japanese-American, the delinquent, the lower-status white, etc. Special considerations which make it desirable to focus on the Negro include the following:

1. Despite the potentially explosive social problems inherent in the Negro slums (Conant, 1961) and in the history of widespread discrimination against Negroes, relatively little study has been made of them. Negroes have been excluded rather systematically

- from studies involved with achievement motivation and with socialization processes.
2. Technological changes make it necessary for the lower status Negro to find some means of radically upgrading his occupational skills in order to compete effectively in the labor market. Undoubtedly, the main avenue by which such upgrading can occur is through effective utilization of educational opportunities.
 3. Evidence suggests that, in general, lower status Negroes are not taking advantage of opportunities available to them; viz., school drop-outs and educational underachievement (Conant, 1961; Jones, 1962).

Overview

The prediction of level of achievement depends on a number of variables, but assuming the presence of adequate facility and opportunity, the problem becomes one of assessing factors of a motivational nature. Good achievement in any activity necessarily involves sustained, goal-oriented behavior directed toward certain classes of desired satisfactions (incentives) which are seen as contingent on good performance..

The class of incentives with which we are chiefly concerned consists of positive affective states which are contingent on successful competition with abstract standards of excellence. McClelland et al. (1953), Atkinson (1958) and their associates have developed and validated a projective measure of the strength of a motive to obtain these incentives. They have called this tendency "achievement motivation." There is an extensive body

of literature which demonstrates consistent and meaningful relationships between achievement motivation as these investigators define it and behaviors which one would expect, on theoretical grounds, to be related to a motive so defined (e.g., academic grades, ratings of prominence in a community, middle class vs. lower class status, upward social mobility, national economic growth vs. decline, and a preference for realistic occupational choices).

A specific problem on which there is little definitive research is the degree to which the distribution of projectively measured achievement motivation among Negroes is similar to that among a comparable group of whites. Historically, the achievement level and rate of upward social mobility among Negroes has been relatively low. Discrimination, the disruption of stable family patterns during slavery, etc., have frequently been cited as possible determinants of this low level of achievement. We assume that another important determinant may be relatively low achievement motivation. Plausibility of this assumption is increased by the evidence from a number of studies (Rosen, 1956; Strodtbeck, 1958) which have shown that variations in the strength of achievement motivation between various religious, national, or ethnic groups are correlated with differential average levels of achievement and upward social mobility rates which characterized the groups. Recently Crockett (1962) has shown a direct relationship between social mobility and projectively measured achievement motivation.

We assume along with Atkinson (1958) that achievement motivation

represents a latent predisposition to compete with standards of excellence. Various other factors determine whether or not achievement motivation will be manifest in high academic achievement. We suspect that because of their particular psychological-social environment, Negro youth are less likely than whites to express achievement motivation through high academic achievement.

The variables under consideration are summarized in Figure 1. Some of the variables have specific relevance to the achievement of the Negro; others to achievement behavior in general.

Two of the key variables, achievement motivation and academic achievement are listed under the headings "motive variables" and "achievement variables" respectively. For our purposes the achievement variable is restricted primarily to academic performance and to behavior associated with academic performance. We realize there are many other types of achievement. However, these other types have been listed under "mediator variables" because we suspect that achievement in non-academic areas acts to attenuate the relationship between achievement motivation and academic achievement. Thus the group of variables referred to as "mediator variables" in Figure 1 are those which either facilitate or impede the expression of achievement motivation through academic achievement. It may be possible, for example, for an individual with low achievement motivation to work hard for extrinsic rewards such as a sum of money for "A" grades. Or an individual with high achievement motivation may fail to achieve at a high level because of strong fear of failure. In either case, the variables

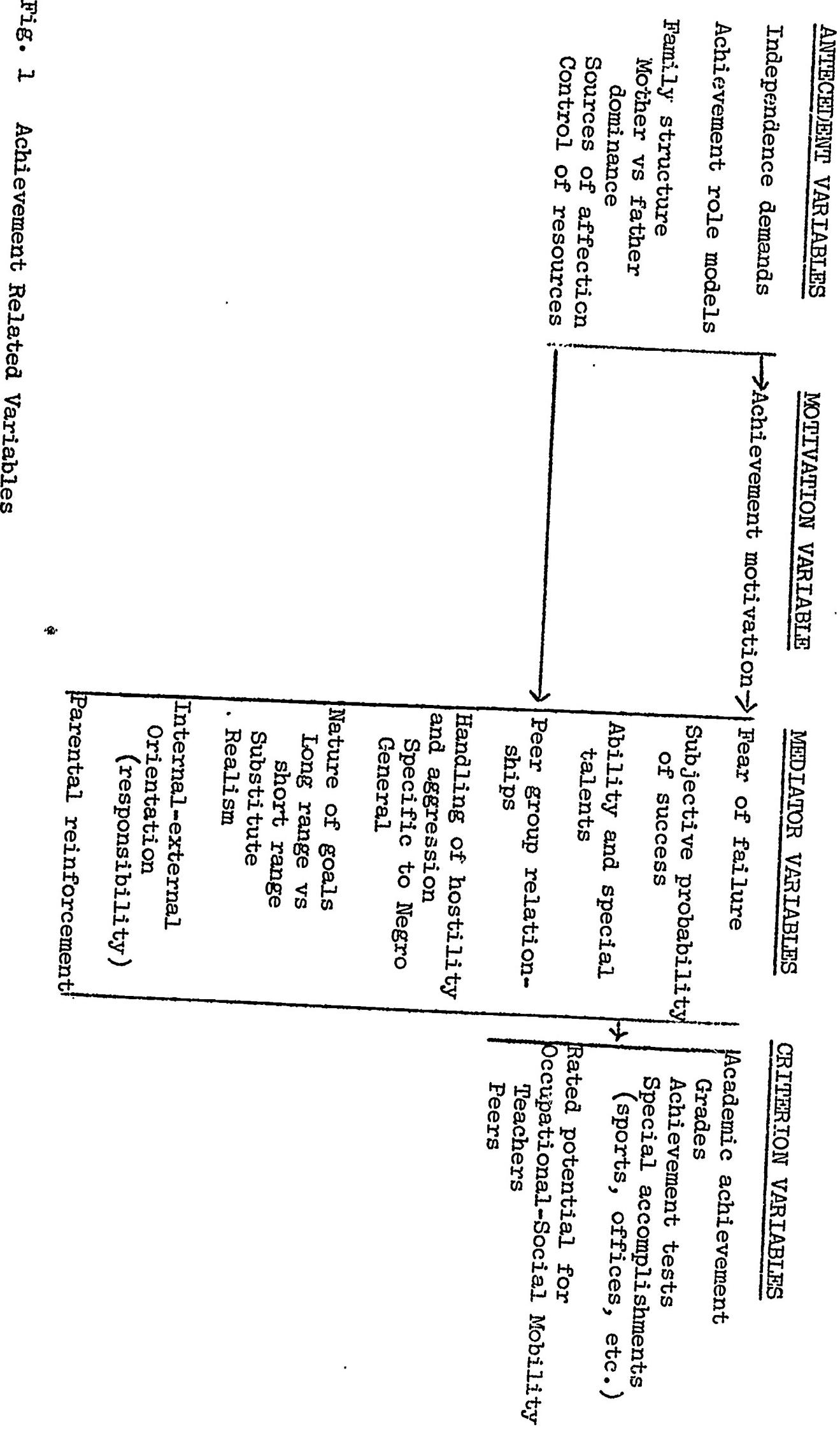


Fig. 1 Achievement Related Variables

act to attenuate the relationship between motivation and achievement.

The final set of variables in Table 1 are labeled "antecedent variables." Under this heading are two general classes of variables thought to be important in the acquisition of personality characteristics through parent-child relationships. The first involves the direct administration of rewards for specific behaviors, such as meeting independence demands; the second involves modeling or identification in which it is presumed that many characteristics are acquired without direct reinforcement.

We are interested in examining the following sets of relationships:

1. those between the motivation and the achievement variables with the mediator variables controlled statistically
2. those between mediator variables and achievement without regard for achievement motivation
3. those between antecedent variables and motivation
4. those between antecedent and selected mediator variables

MEDIATOR VARIABLES

Among groups of Negro and white students, with respect to academic ability and strength of achievement motivation, we would expect the degree of relationship between achievement motivation and overt academic achievement to be less for the Negro. This expectation is based on the assumption that factors which tend to prevent the expression of achievement motivation through academic achievement are more salient for the Negro. A number of factors which attenuate the relationship between achievement motivation and academic achievement are discussed in the following sections.

Fear of Failure

It is probable that the relationship between achievement motivation and academic achievement is lower among students who have high fear of failure in academic situations than among those with relatively low fear of failure. Atkinson (1958) and McClelland et al. (1953) have assumed that individuals with strong achievement motivation tend to approach achievement related tasks. Other individuals characterized by high fear of failure tend to view all achievement situations as potential threats and are motivated to avoid such situations. We assume that everyone possesses both of these motives in some degree. When achievement motivation is clearly predominant, the individual should strongly approach achievement tasks, and successful achievement would be clearly predicted if adequate ability is present. When fear of failure is predominant, the individual would tend to avoid all achievement tasks and obviously his performance would be expected to be relatively ineffective. In fact, the individual with high fear of failure and low achievement motivation must be coerced to remain in an achievement situation at all. Even if he is forced to remain, persistent desires to leave such situations are presumed to interfere seriously with the effectiveness of performance. Thus fear of failure should be inversely related to level of academic achievement and previous research has confirmed this expectation for whites (Sarason et al., 1960).

Subjective Probability of Success

It is likely that Negro youth who have high achievement motivation and who see their probability of success with respect to academic achieve-

ment as very discrepant from .50 will tend not to show strong evidence of overt academic achievement. Also, low perceived probability of success with respect to academic achievement should characterize Negro students to a greater extent than is the case for white students.

The rationale for these two statements is derived largely from a model of motivation developed by Atkinson (1957). The model implies that the maximum strength of overt effort with motivation held constant occurs when the subjective probability of successful achievement is .50. As probability of success on an achievement task deviates either way from this figure, overt strivings to succeed on that task will decrease. Thus, even if the individual has strong achievement motivation, he will not work hard in situations in which he perceives the probability of success to be either very high or very low. We expect Negroes to perceive their probability of academic success as lower than that perceived by whites.

Atkinson's model has considerable immediate practical relevance for educational programs designed to motivate disadvantaged youth. While achievement motivation has been described by both Atkinson and McClelland as a motive which is learned very early in life and is probably not particularly susceptible to later modification, subjective probability of success might well be modifiable by educational approaches. By increasing the subject's subjective probability of success, he might be enabled to achieve at a level commensurate with his ability and motivation.

Peer Group Relationships

We suspect that Negro students with high achievement motivation who

value peer approval strongly and who feel that peers disapprove of academic achievement will not achieve at a level commensurate with their ability. It is also likely that Negro students are more dependent on peer approval than a comparable group of white students.

Unresolved conflicts between the values of peers and adults have been noted to be related to low achievement in a number of different social groupings (Coleman, 1961), but it would seem to be especially important for the lower status Negro. Faced with hostility from the dominant white world, his major source of security may lie in close identification with and support from members of his own race. To be able to shift allegiance to a new reference group one must have some confidence that the new group will be sufficiently accepting to provide at least some of the security and support lost by leaving the original group. For the white child, this shift in allegiance may be relatively easy because he has good reason to expect that if he adopts the values, attitudes, and work habits of the dominant adult group, he will be accepted into that group and be reasonably well rewarded for his efforts. Furthermore, the middle class white child probably has already internalized, as a result of his early training, many of the values of the dominant white world, and any deviation he shows as a result of peer pressures is probably a temporary straying from the "path to middle class respectability." The lower-class Negro child, even if he has learned values of the dominant adult, as a result of early training, should find it much more difficult to respond to adult achievement demands in the face of peer disapproval because of his greater dependence on the Negro peer group for support.

Findings that fear of peer disapproval is an important determinant of low achievement among potentially capable Negroes would have implications for possible ameliorative action. If the fears of rejection of the potentially achieving Negro are exaggerated or unrealistic, this barrier could be reduced. If the peers are in fact rejecting the achieving Negro, then the problem becomes either one of attempting to change the attitude of the peer group or of strongly supporting the potential achiever in his attempts to become independent of his group.

Adaptation to Negro Status

It is quite likely that modes of dealing with Negro status are related to overt academic achievement of Negro youth. A possible source of conflict with achievement demands is the hostility which must be aroused in many Negroes by the frustration resulting from the rejection and persecution by the dominant group. There may be a strong inclination to reject demands seen as emanating from individuals toward whom considerable hostility is directed. Thus, we are interested in exploring patterns used by Negroes to control hostile impulses and the relationship between these patterns and overt achievement.

We would expect the Negro child to adapt to his Negro status in a number of ways, such as: by developing an "accommodation" reaction -- a clear attempt to behave in a manner consistent with expectations of the dominant groups (Rose, 1948); by perceiving himself to be a potential racial leader or representative and working hard to achieve in order to be a good representative of his race; by attempting to beat the white man

at his own game and by striving hard to achieve at an outstanding level; by withdrawing from almost all socially accepted means of competing with the dominant group and retreating into sullenness, apathy, or anti-social acting out of the hostile feelings; and by turning aggression against the self. These techniques for handling the aggression generated by Negro status may be considered to be special cases of more generalized modes of dealing with frustration which we will discuss in the next section.

Internal-External Responsibility

When matched for ability and achievement motivation, Negro youth who assume personal responsibility for success or failure probably will tend to achieve at a higher level than will students who do not assume such responsibility.

Research evidence indicates that the tendency to internalize or externalize responsibility becomes a rather consistent mode of reacting to frustration. We assume that the individual who accepts responsibility for his own fate will tend to blame himself and probably experience some degree of guilt in face of failure. By contrast, the person who attributes responsibility for his fate to forces outside himself is not likely to experience such guilt or self-blame.

The individual who typically externalizes the source of frustration may show less persistence at a long and arduous task because he has a ready-made, face-saving reason for failure. Those who internalize responsibility are faced with the more difficult task of admitting deficiencies in themselves, and we assume this trait is positively related to

achievement because the individual persists in attempts to succeed in order to avoid self-condemnation.

Although there is a predisposition for an individual to employ one mode of reaction over another, both modes may be used in some degree, depending on the reality of the situation of the moment. Because of the powerful and clear-cut external frustration of the "Negro World," (i.e., discrimination) it is relatively unlikely that the Negro will attribute his difficulties to internal deficiencies even if he were predisposed to do so. Thus achievement for the Negro may be related to unusually strong tendencies to assume personal responsibility for success or failure. In fact, internalization of responsibility may be so strong that achievement for many Negro youths will be quite costly in terms of guilt, self-blame, and general psychological stress. Thus there may be relatively frequent occurrence of certain psychopathological symptoms among achieving students.

Goals and Values

We expect that successfully achieving Negro youths have begun to develop life goals and that these goals are relatively more realistic in terms of ability and opportunity than those of subjects who are not overtly achieving. While life career aspirations are not likely to be too stable in Negro youth, the general nature of goals which the individual sees as an end result of his achievement striving should provide an index of the degree of realism of goals and of the extent of concern for long-range planning.

For many individuals the inducement for sustained, overt achievement

may be a series of short-term goals such as attaining parental approval and remaining eligible for the ball team. Because of the relative dearth of Negroes who have made appreciable socio-economic advances and who could serve as achieving role models, it may be exceedingly difficult for lower-class Negroes to establish realistic long-range goals. The possibility of their attaining such a goal if it involves upward mobility may seem quite remote to them. Thus goals of achieving Negro adolescents may tend to be predominantly of the short-term variety.

Achievement in Non-Academic Areas

It is likely that youth with high achievement motivation who are not achieving academically at a level commensurate with their ability show a greater incidence of achievement in non-academic activities than do youth with high achievement motivation who are achieving academically.

The selection by the individual of the particular activities through which achievement motivation is expressed is complexly determined. The nature of the variables which account for the selection or rejection of academic strivings as a focal point for the expression of this motivation are still to be determined. One plausible reason why this motivation is not expressed through academic strivings is that the student is using other means of attaining the kinds of gratifications which academic success might allow him. He might be competing successfully in music, athletics, or a science hobby, as examples.

However, our reasoning should be qualified by the possibility that some of the deterrent (mediating) factors previously described may have a

generalized tendency to inhibit achievement strivings. Thus fear of failure, for example, may prove to be a generalized trait which seriously interferes with achievement in all areas. However, we are proceeding with the tentative hypothesis that Negro youth with high achievement motivation will show a greater frequency of achievement strivings in non-academic areas than do a comparable group of whites. We make this assumption because we assume that the factors which we have argued act to deter the expression of achievement motivation in academic activities should be of greater impact among Negroes than among whites.

ANTECEDENT VARIABLES

As indicated in the introduction, we are interested in examining a number of important problems related to the early socialization process. These include the following:

1. the relationships between the nature of independence demands made on the child and his achievement motivation and fear of failure,
2. the relationships of parental nurturance and affection to achievement motivation and fear of failure,
3. the use of certain aspects of Whiting's theory of identification to account for the adoption of achieving role models and of the adoption of roles related to fear of failure,
4. the relationships between the family structure in lower-status Negro homes with modes of dealing with aggression and with need for achievement and fear of failure.

Because of the rather complex theoretical nature of these relationships, we have included a rather lengthy discussion of the relevant theoretical material in the next sections.

Independence Demands and Achievement Motivation

Previous research has indicated that achievement motivation is developed quite early in life and that it is the timing of independence demands and the clear reinforcement of early independence behavior which promotes the development of this motive. Winterbottom (1958) has offered fairly clear evidence for this relationship in the case of middle-class white children. Evidence that this relationship holds across cultures is presented by McClelland and Friedman (1952). Concretely, the parents of the child who develops a high need for achievement expect him to be able to do many things earlier and with less adult assistance than do the parents of the child who does not develop a strong need to achieve. However, ignoring the child and forcing him to perform many tasks on his own because the parents are absent or indifferent presumably is not effective in generating high need achievement.

McClelland (1958) accounts for the relationship between achievement motivation and early independence training in terms of the fact that early learning occurs before the extensive development of the capacity for verbal labeling. Prior to the extensive development of verbal skills, the child's capacity to understand precisely what aspect of his behavior is being rewarded is relatively limited. Thus, the child who is rewarded relatively early in life for specific independence behaviors may be learning a very

generalized predisposition toward independent behavior which is resistant to extinction. If the independence training is begun later in life, the child is better able to perceive precisely what he is being rewarded for and the motivation toward independent achievement is less generalized and more easily extinguished.

The efficacy of reward or punishment from the parent appears to be increased when a close, affectionate, dependent attachment to the parent has been developed by the child. Apparently, under these circumstances a strong internalization of parental values is likely if parents threaten to withdraw affectionate gratification as a disciplinary technique. In the case of independence training the child receives affectionate gratification from parents for activities which make him less dependent on parents and thus eventually less in need of their affection. It would seem that the only manner in which this transformation can take place is for the child to clearly internalize parental reactions and come to "reward himself" for his own independent accomplishment. This explanation seems analogous to descriptions of the process of learning of moral standards through identification as described by Freud (1949) and later by Sears et al. (1957). We will attempt to show later that the theory of identification developed by Whiting (1960) may predict the same relationship between early independence training and independent achievement behaviors but on a somewhat different basis from that used by McClelland (1958).

Independence Demands and Fear of Failure

We have argued that the manner in which the child's dependency needs

are dealt with has an impact on the kinds of motivations with which an individual approaches achievement tasks. If he has been "weaned" from dependency through early encouragement and reward for independent behavior, he may tend to develop strong internalized reward systems which allow him to strive for achievement in a manner free of crippling ambivalences which we expect to characterize other individuals whose independence training has not followed this pattern of encouragement and reward. The individual who develops high fear of failure may, in contrast to the individual who develops high achievement motivation, never clearly resolve the dependency conflict. Failure to resolve the dependency conflict may occur if independence behavior is not rewarded or perhaps is even punished. Or perhaps the parent of the child who develops high fear of failure tends to punish him when he fails rather than to reward him for success.

There is another pattern of parent-child relationship which may be related to the development of fear of failure. In this pattern the parent makes demands for independence relatively late, but when the demands are made they are quite severe and relatively difficult for the child to meet because he has had little previous encouragement toward independent behavior. Thus, the child may be unable to meet the demands with facility and the consequent failure is met with a threatened withdrawal of dependency gratification.

In summary, we suspect that parents of the child with strong achievement strivings will have made early independence demands and will have clearly rewarded compliance with these demands. The parents of the child with high fear of failure will report having made relatively late independence demands

and will tend to report having placed emphasis on punishment of failure to comply with these demands rather than on reward of successful compliance with these demands.

Identification

We assume that the characteristics relevant to achievement and to upward mobility can be acquired through training involving reward or punishment applied directly to specific examples of the behavior as they appear in the child. Reinforcement of independence behavior is a relevant example. However, it is also frequently assumed that the child develops a number of generalized personality characteristics which are never directly reinforced, but which are acquired as a result of identification with significant figures in the child's life.

Whiting (1960) has developed a theory with which he attempts to delineate the factors promoting identification. For a number of reasons we feel this theory has special relevance to the problem of socialization among Negroes, and we hope to test a number of implications of this theory.

Whiting assumes that the child will identify with anyone whom he sees as a controller of resources. Resources are defined as anything which the individual values; e.g., food, air, freedom from pain, and important derived resources such as love and praise. The withholding of any resource is considered to be motivating. Although a child can have direct access to and control over some resources such as air or rest, there are many, particularly when he is very young, that he can obtain only through others. Whiting terms this kind of relationship between a person and a resource "indirect

control of a resource" or "child role behavior." Utilizing the concept of indirect control, Whiting defines socializing agents as resource administrators. If a child perceives that another person has a better means of control over a resource than he, himself, has; it is Whiting's assumption that he will envy the other and strive to emulate him through both covert and overt practice. The individual is not envied if he merely gives valued resources. It is necessary, presumably, that the parent withhold the resources from the child.

Whiting's hypothesis is that the more a person envies the status of another, the more he will covertly (through fantasy activity) practice the other's role. The overt performance of role by a child will depend upon three factors: (1) the clarity of his cognizance of it; (2) the degree to which he has covertly practiced it; and (3) the occurrence of a situation which is, to some degree at least, appropriate for its performance.

The roles associated with strongly envied statuses may persist in the face of repeated failure. The greater the envy of a status the more the roles associated with such status will be covertly practiced and the more persistently will the role be overtly practiced when it is appropriate, or even when it is inappropriate. It seems likely that roles associated with highly envied statuses may be very persistent if the opportunities for overt modifications through practice and reinforcement do not present themselves.

There are clear provisions in Whiting's theory for conflict in roles. If, for example, a mother has had control of the values resources for a boy, the boy will envy her status and strive to perform her role. Because of the

mother's sex role, some of her behavior that he desires to emulate is sex-typed and forbidden to him. Thus he would find himself in conflict. He may continue to covertly practice her role and thus would have a feminine self-image.

Age grading of roles may also lead to conflicts in the socialization process. Cultural rules typically permit a very young child indirect control of resources through manipulation of others and deny him the right to such control at a later age. If direct control of resources is never achieved at a satisfactory level, the child may envy his own previous status and tend to covertly and perhaps overtly practice the inappropriate roles associated with the earlier status.

Social maturity requires the learning of statuses which involve the direct control of resources, independence, and the mediation of resources for others. The development of social maturity, then, depends on all the factors which would eventually lead to the possibility of successful overt practice of the socially mature role. We see many similarities between the description of the attributes of the potential achiever and the attributes of the socially mature role as set forth by Whiting, and so his theory, intended to account for the development of this role, has great relevance to the problem in which we are interested.

First, the lower class Negro child may simply lack an immediately visible role model who embodies the characteristics essential for successful achievement. The prerequisite for the adoption of a particular role model is cognitive awareness of such a model. In biographies of successfully achieving Negroes (e.g., Embree, 1943), both the father and mother are

typically described as hard working, responsible and self-sacrificing. This family situation is in marked contrast to the description of the typical lower class Negro family in which the father is seen as irresponsible and the mother or the grandmother represent the only available model personifying self-control and willingness to sacrifice for later gain.

Upward social mobility of a family is usually achieved through improvement in the competitive position of males. It falls upon the Negro mother, then, to train her son in behaviors characterizing the achievement model, and she lacks the extremely important advantage of being able to point to a visible and prestigious achieving model directly within the child's awareness.

Of course, it is possible that cognizance of the role model might be acquired from a variety of sources other than parents or parent substitutes. Role information might be obtained from other successful adults, peer groups, mass media, school curriculum, etc. In view of accumulated evidence on the importance of the early socialization techniques used in the family, however, it is unlikely that these additional sources of information will have appreciable effect on achievement motivation unless an achievement oriented role model has been provided within the family background. In fact, it might be argued that programs of enrichment or other means of providing cognizance of the achievement role model are effective only with those who are already latent achievers.

The fact that the mother and not the father personifies the achievement model poses special problems for the Negro male child. For one thing, the mother is likely to be the major controller of resources and the male child

may strongly tend to identify with her. However, this identification cannot be a comfortable one because other forces in the child's environment push him in the direction of a masculine identity. The resultant conflict may lead to an over-emphasis on obviously "masculine" characteristics and a defensive avoidance of any behavior considered "feminine." Thus, the Negro male child may perceive achievement related characteristics as feminine and avoid such behavior, at least on an overt level, because he lacks a masculine model who possesses these characteristics. Incidentally, the problem may be compounded by the fact that almost all of the child's early teachers are female.

On the other hand, it is possible that a male can identify with a rather abstract achievement model highly valued by the mother and to achieve academically without experiencing severe sex-role conflicts. Abbeglen (1958) has shown that socially mobile white executives who have moved from low status backgrounds to positions of high prestige in the business world, tended to perceive their fathers as quite inadequate; their mothers as strong and dependable. Some of Abbeglen's findings, however, suggest that this social mobility had been accompanied by an unusual amount of stress.

We would argue that the middle-class mother is more likely to have at her disposal relatively visible male models who personify achievement behaviors than would the lower-class Negro mother. The middle-class mother, in addition to her husband, may have a brother or father or close friend of the family whom she can use as a role model representing the desired characteristics. Our study would allow for an opportunity to examine these differences.

There is evidence that considerable stress may accompany the identity confusion generated in the male child by the dominance of the mother. Kohn and Clausen (1956) point to maternal dominance as a prominent factor in schizophrenia, and others see mother dominance as a contributing factor in the development of other forms of psychopathology. In other instances, this familial pattern does not disrupt adaptation to social demands (Abbeglen, 1958; Nachman, 1960).

We are interested in determining the conditions under which the inadequate father--dominant mother relationship characteristic of many lower status Negro families is related to effective achievement, and under which conditions it is related to non-achievement.

Another set of implications from Whiting's theory stems from his distinction between covert and overt practice of a role. It is possible that some children may have covertly identified with a role model personifying achievement related characteristics. These individuals we would call "latent" achievers. Possibly because overt practice of the achievement-oriented role has never been rewarded or, as we discussed above, achievement behaviors are incompatible with other aspects of the self-concept, practice of the achievement role remains covert. This hypothetical group of children may respond with overt achievement strivings if relevant rewards are provided.

As pointed out by Maccoby (1959), covert practice may be effective only with certain types of behaviors such as attitudes and values. It is not likely to be effective in the development of skills because such skills require feedback (overt learning) which can only be derived through overt practice.

We suspect that in order to raise the achievement motivation and achievement record of this latent group, it will be necessary to concentrate on helping them develop the skills essential to the utilization of the motivation which is already there. The skills can best be developed by providing opportunities for overt practice and accurate feedback to such practice. It may well be that young Negroes are especially likely to delay overt practice of behaviors commonly associated with achievement. Consequently, their strivings when they do emerge may be awkward or inappropriate; thus leading to censure from peers with appropriate social skills or from powerful adults such as the classroom teacher. Such censure is likely to discourage further overt practice. We plan to examine the latent achieving group for evidence of delayed practice and the consequences for the individual of overt practice inappropriate for his particular age group.

The cited relationship between achievement motivation and early independence demands may be predicted from Whiting's theory of identification. We would argue that to ask the child to be independent is to ask him to assume direct control of resources. The parent who makes these demands must be perceived as withholding the resources which he controls. This leads to status envy on the part of the child and a desire to emulate the parental role which itself permits direct control of coveted resources. As pointed out earlier, Winterbottom's evidence suggests that reinforcement of independent behavior is important in the development of achievement motivation. This reinforcement may be what Whiting refers to as reinforcement of overt practice. Failure to reward this behavior means that overt practice is inhibited and the child may drop back to his previous status as an indirect controller of

resources. Thus this experience should promote a strong tendency to fear independent behavior and to cling to indirect manipulation of resources, characteristics which will lower the chances of successful achievement.

Socialization of Aggressive Impulses

Every member of a society is faced with the problem of learning to manage and control his aggressive impulses more or less in accord with the demands made by the society of which he is a member. There is a vast body of literature, both theoretical and empirical, which attacks this problem from many points of view and with a wide variety of techniques and research populations. We have much data to draw on in making predictions about the socialization techniques which may be related to particular modes of aggressive expression without reference to the fact that we are studying Negroes as such. However, there are many factors in the life experiences of the Negro which obviously must be strongly affected by the fact that as a Negro he has been a prominent target for the hostility of the dominant group. There has been relatively little intensive or systematic study of the impact of Negro status on learning to control aggression.

There must occur considerable explicit teaching by parents of particular ways of expressing aggression as a Negro in a white dominated culture. For example, local school officials report that some Negro children are taught to respond to any slight or insult with immediate physical retaliation. Some other children are told to try to ignore such incidents and to concentrate their energies on the acquisition of skills which will enable the child to attain a position of power in which he can feel relatively insensitive to

this kind of attack. Other children are explicitly taught to adopt the racial model role and to attempt to maintain self-control and continue striving for achievement in spite of artificial barriers and hostility. Through interviews with parents and children, we plan to study these explicit attempts at teaching particular ways of dealing with aggressive impulses.

The learning of generalized modes of expression of aggression or reacting to frustration has often been presumed to have a close connection with the process of identification. Guilt, self-blame, and strong conscience development are thought to be related to specified child rearing practices which promote an identification with and an internalization of parental evaluations of the child's behavior, especially evaluations of a moral nature. The child who develops this kind of identification will presumably direct aggressive impulses toward the self. According to the best evidence to date, the type of circumstances which promote identification with parental moral standards is the family situation in which the child perceives a clear threat of withdrawal of love or nurturance if he fails to conform to parental demands. However, threats to withdraw love are not effective in promoting strong internalization unless the child has previously received an ample supply of love (Sears et al., 1957).

There is also an accumulating body of evidence that the child's chief source of nurturance must be seen by the child as an effective disciplinarian. When the chief disciplinarian is not also an important source of nurturance, internalization tends to be minimal (Moulton et al., 1962). When the separation of the disciplinary function and the provision of love are marked, internalization seems to be so weak that aggressive impulses may be expressed

outwardly to such a degree as to reach anti-social proportions (Bandura & Walters, 1959). The threat to withdraw love is also clearly realistic and inescapable when the parents or parent surrogates consistently support each other's disciplinary demands. When there is a clear separation of disciplinary and nurturant functions within the family, and if the nurturant figure makes nurturance contingent on the child remaining within the good graces of the disciplinarian, the child is placed in a position in which failure to conform to the demands of either parent is met by a realistic threat of withdrawal of love. Several studies (Glueck & Glueck, 1950; Bandura & Walters, 1959) have shown that children who have parents who tend to support each other's disciplinary activities show evidence of strong internalization. Thus, the problem of predicting the extent of internalization is basically one of analyzing the extent to which the child will experience a realistic and meaningful threat of withdrawal of love if he fails to conform to parental demands.

Within the lower class Negro family relevant patterns in the distribution of discipline and nurturance are likely to be relatively diffuse or less clearly defined. The position of the father with respect to either of these functions may be minimal or erratic. Thus, the rearing of the child falls to the mother, siblings, or often, as we understand it, to the maternal grandmother. To the extent that this allows the child to avoid the necessity of coming to terms with parental demands because there is no consistent threat to withdraw love, internalization is not likely to be strong.

In addition, the wide diffusion of sources of nurturance may make the threat of withdrawal of any one source relatively less threatening. If one

nurturant individual threatens to withdraw this nurturance if the child does not conform, the child may be able to find another individual who will continue to support him without requiring conformity to the demands. But where the family structure forces the child to face up to parental demands, or to be threatened with loss of love, we suspect that he will likely resolve the conflict between his own desires and those of the socializing agent by adopting their demands as his own.

In our study we propose to examine selected typical kinds of interactions which involve frustration of the child's desires. We will examine the consistency across socializing agents with which the demands are made and enforced and the types of disciplinary measures employed to enforce these demands. We would hope to be able to make a judgment in each case as to the likelihood that failure to conform to demands on the part of the child will be perceived by him as posing a realistic threat of withdrawal of love. With these data we can predict the particular pattern the child will develop in dealing with aggression.

From the above discussion, a number of expectations or hypotheses concerning relationship between antecedent variables and the other variables under consideration, can be derived. These are summarized below:

1. Parents of the child with high fear of failure will report that they made relatively late independence demands and tend to report an emphasis on punishment for failure to comply with these demands rather than on rewarding successful compliance with them.
Parents of the child with high achievement motivation will report the opposite pattern.

We have described the process whereby an individual develops a tendency to blame others or factors beyond his control for his frustration and thus the aggression would be turned toward the self (internalizer). Summarized below are conditions concerning the affairs within the family which are conducive to the development of one or the other of these two tendencies.

2. Conditions within the families of children who show the internalization pattern of reacting to aggression will be characterized as follows:

- a. Relationships with socializing individuals are characterized as warm and affectionate.
- b. The child's chief source of affection is focused in one or just a few individuals.
- c. The use of threat to withdraw love is frequently used as a disciplinary technique.
- d. Major disciplinarians within the families tend to be important sources of nurturances; i.e., the source of nurturance and disciplinary threat tend to be the same individual.
- e. The socializing agents in the family support each other's demands on the child.

3. The families of the externalizers show the following characteristics:

- a. The socializing agents are relatively less warm and affectionate in relationships with the child.

- b. Sources of nurturance are more diffuse; i.e., the supply is relatively less focused in one or a few individuals.
- c. Withdrawal of love is relatively infrequently used as a disciplinary technique.
- d. Sources of nurturance and discipline tend to be centered in different individuals.
- e. Socializing agents make relatively fewer mutual reinforcement demands.

The following expectations are based largely on Whiting's theory.

- 4. Overtly achieving youth will more likely have parents who personify the achieving model than will the non-achieving youth, i.e., the achieving child is more cognizant of the achieving model.
- 5. High achieving male youth from mother-dominant, weak-father families will present more evidence of sex role conflicts than will the non-achievers from the same type of family background.
- 6. A number of youth who are not overtly manifesting responsible achievement oriented behavior are covertly practicing such a role--as evidenced in phantasy production. (We refer to this group as "latent achievers." It is the latent achievers who, we believe, will be responsive to ameliorative procedures to upgrade overt achievement.)

REFERENCES

1. ABEGGLEN, J. C. Personality factors in social mobility: A study of occupationally mobile business man. Genet. psychol. Monogr., 1958, 58, pp. 101-159.
2. ATKINSON, J. W. Motivational determinants of risk-taking behavior. Psychol. Rev., 1957, 64, pp. 359-372.
3. ATKINSON, J. W. (Ed.). Motives in Fantasy Action and Society. Princeton: Van Nostrand, 1958.
4. BANDURA, A., and WALTERS, R. H. Adolescent Aggression. New York: Ronald Press, 1959.
5. BIRNEY, R. C., BURDICK, H., TEEVAN, R. C. The effects of failure on fantasy. Unpublished paper.
6. BRONSON, W. C., KATTEN, E. S., and LIVSON, N. Patterns of authority and affection in two generations. J. Abnorm. soc. Psychol., 1959, 58, pp. 142-52.
7. COLEMAN, J. S. The Adolescent Society. New York: The Free Press, 1961.
8. CONANT, J. B. Slums and Suburbs. New York: McGraw-Hill, 1961.
9. DAVIS, A. and HAVIGHURST, R. J. Social class and color differences in child-rearing. Amer. sociol. Rev., 1946, 11, pp. 698-710.
10. EMBREE, E. R. 13 Against the Odds. New York: The Viking Press, 1943.
11. FREUD, S. An Outline of Psychoanalysis. New York: Norton, 1949.
12. GLUECK, S., and GLUECK, Eleanor. Unraveling Juvenile Delinquency. Cambridge: Harvard University Press, 1950.
13. HELPER, M. M. Learning theory and the self-concept. J. Abnorm. soc. Psychol., 1955, 51, pp. 184-194.
14. JONES, L. W. The social unreadiness of Negro youth. Sat. Rev., October 20, 1962.
15. KOHN, M. L. and CLAUSEN, J. A. Parental authority behavior and schizophrenia. Amer. J. Ortho., 1956.
16. MACCOBY, Eleanor. Role-taking in childhood and its consequences for social learning. Child Develpm., 1959, 30, pp. 239-52.

17. MANDLER, G. and SARASON, S. B. A study of anxiety and learning. J. Abnorm. soc. Psychol., 47, pp. 166-173.
18. McCLELLAND, D. C. The importance of early learning in the formation of motives. In Atkinson, J. W. (Ed.), Motives in Fantasy Action and Society. Princeton: Van Nostrand, 1958, pp. 437-452.
19. McCLELLAND, D. C. The Achieving Society. Princeton: Van Nostrand, 1961.
20. McCLELLAND, D. C. and FRIEDMAN, G. A. A cross-cultural study of the relationship between child-rearing practices and achievement motivation appearing in folk tales. In G. E. Swanson, T. M. Newcomb, and E. L. Hartley (Eds.), Readings in Social Psychology, 2nd edition. New York: Holt, 1952, pp. 243-249.
21. McCLELLAND, D. C., ATKINSON, J. W., CLARK, R. A., and LOWELL, E. L. The Achievement Motive. New York: Appleton-Century Crofts, 1953.
22. McCLELLAND, D. C., RINDLISBACHER, A. and DeCHARMS, R. Religious and other sources of parental attitudes toward independence training. In McClelland, D. C. (Ed.), Studies in Motivation. New York: Appleton-Century Croft, 1955, pp. 389-397.
23. MCKINNON, D. W. Violations of prohibitions. In Murray, H. A., et al., Explorations in Personality. New York: Oxford University Press, 1938.
24. MOULTON, R. W. Antecedents of aggressive expression in psychosis. Unpublished doctoral dissertation, University of Michigan, 1957.
25. MCULTON, R. W. Notes for projective measure of fear of failure. In Atkinson, J. W. (Ed.), Motives in Fantasy Action and Society. Princeton: Van Nostrand, 1958.
26. MOULTON, R. W. The effect of success and failure on level of aspiration: A test of Atkinson's risk-taking model. Unpublished paper.
27. MOULTON, R., ALTUCHER, N., BURNSTEIN, E. and LIBERTY, P. Guilt and masculinity-femininity as related to perceived patterning of disciplinary dominance and availability of dependency gratification in parents. Paper read at 1962 meetings of American Psychological Association.
28. NACHMANN, Barbara. Childhood experience and vocational choice in Law, Dentistry and Social Work. J. counsel. Psychol., 1960, 7, pp. 243-250.
29. O'CONNOR, Patricia. An achievement risk preference scale: A preliminary report. Paper read at the 1962 meetings of American Psychological Association.

30. ROSE, AL. The Negro in America. New York: Harper, 1948.
31. ROSEN, B. The achievement syndrome. American Sociol. Rev., 1956, 21, pp. 203-211.
32. SARASON, S. B., DAVIDSON, K. S., LIGHTHALL, F. F., WAITE, R. R., and RUEBUSH, B. K. Anxiety in Elementary School Children. New York: Wiley, 1960.
33. SEARS, R. R., MACCOBY, ELEANOR E., and LEVIN, H. Patterns of Child Rearing. Evanston: Row, Peterson, 1957.
34. STRODTBECK, F. L. Family interaction, values and achievement. In McClelland, D. C., et al. (Eds.), Talent and Society. New York: D. Van Nostrand, 1958.
35. WHITING, J. W. M. Resource mediation and learning by identification. In Iscoe, I. and Stevenson, H. W. (Eds.), Personality Development in Children. Austin: Univer. Texas Press, 1960, pp. 112-126.
36. WILSON, A. T. Residential segregation of social classes and aspiration of high school boys. Amer. Soc. Rev., 1959, 24, pp. 336-845.
37. WINTERBOTTOM, M. R. The relation of need for achievement to learning experiences in independence and mastery. In Atkinson, J. W. (Ed.), Motives in Fantasy Action and Society. Princeton: Van Nostrand, 1958, pp. 453-478.

Appendix B

Student's name _____

Will you please rate the above-named student on the following traits. Place a check in the appropriate column.

	Sometimes or Rarely	Frequently	Nearly Always
1. Prompt in handing in assignments.	_____	_____	_____
2. Courteous to teachers and school authorities.	_____	_____	_____
3. Popular with his peers.	_____	_____	_____
4. Regarded as a leader by his peers.	_____	_____	_____
5. Works hard to get good grades.	_____	_____	_____
6. Volunteers for class responsibilities.	_____	_____	_____
7. Initiates out-of-class activities.	_____	_____	_____
8. Works at or near his intellectual capacity.	_____	_____	_____
9. Fights and/or uses abusive language.	_____	_____	_____
10. Takes his books home with him so that he can complete homework assignments.	_____	_____	_____
11. Active in extra-curricular activities such as clubs.	_____	_____	_____
12. Active in sports.	_____	_____	_____
13. Completes school assignments without assistance from his peers.	_____	_____	_____
14. Seeks special help from teachers.	_____	_____	_____
15. Helps his friends do better work in school.	_____	_____	_____
16. Avoids tasks because he fears failing.	_____	_____	_____
17. "Sensitive" about real or imagined attacks on his person.	_____	_____	_____

The following questions cover the types of topics you may want to discuss in your groups. We think you will find them interesting to answer. This is not a test. There are no right or wrong answers. Please try to answer the questions exactly the way you feel. Mostly the questions can be answered by making a check mark next to the statement which best describes what you do, or the way you think or feel. There are a few questions which ask you to fill in blanks. If you have any questions, ask the counselor to help you.

If you have any comments or criticisms about these questions, or if you feel that you have some ideas about questions that would be more meaningful to you, please feel free to write down your ideas on the back of these sheets. We will appreciate any help you are willing to give us.

1. If school were not compulsory, and it were completely up to you, would you ...

stay in school until graduation
 leave school before graduating
 don't know

2. What would you most like to get from high school? _____
- _____
- _____
- _____

3. How much time, on the average, do you spend doing homework outside school?

none, or almost none
 less than 1/2 hour a day
 about 1/2 hour a day
 about 1 hour a day
 about 1-1/2 hours a day
 about 2 hours a day
 3 or more hours a day

4. Suppose you had an extra hour in school and could either take some course of your own choosing, or use it for athletics or some other activity, or use it for study hall. How would you use it?

course
 athletics
 club or activity
 study hall, to study
 study hall, to do something else

5. About how many evenings a week do you spend out with other fellows?
(Circle the number of evenings)

0 1 2 3 4 5 6 7

6. About how many evenings a week do you spend at home?
(Circle the number of evenings.)

0 1 2 3 4 5 6 7

7. How often do you go to the movies?

- never, or almost never
- about once a month or less
- about once every two or three weeks
- about once a week
- about twice a week
- more than twice a week

8. With whom do you go most often?

- by myself
- with a date
- with other fellows
- with a group of boys and girls
- with members of my family

9. About how much time, on the average, do you spend watching TV on a weekday?

- none, or almost none
- about 1/2 hour a day
- about 1 hour a day
- about 1-1/2 hours a day
- about 2 hours a day
- about 3 hours a day
- 4 or more hours a day

10. Different people work for different things. Here are some things that you have probably thought about. Among the things you work for during your school days, just how important is each of these. Think about these things and then check the one which is most important to you.

- pleasing my parents
- learning as much as possible in school
- living up to my religious ideals
- being accepted and liked by other students

11. Below is a list of items on which some parents have rules for their teen-age children, while others don't. Check each item that your parents have definite rules for.

- time for being in at night on weekends
- amount of dating
- against going steady
- time spent watching TV
- time spent on home work
- against going around with certain boys
- against going out with certain girls
- eating dinner with the family
- no rules for any of the above items

12. What fellows here in school do you go around with most often? (Give both first and last names.)
-
-
-

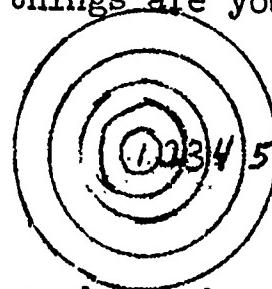
13. What do you and the fellows you go around with here at school have most in common -- what are the things you do together?
-
-
-

14. Among the crowd you go around with, which of the things below are important to do in order to be popular in the group?
(Check as many as apply)

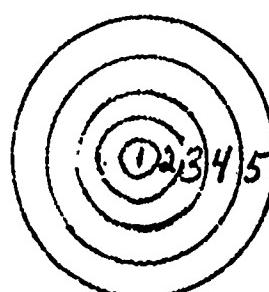
- be a good dancer
- have sharp clothes
- have a good reputation
- stirring up a little excitement
- have money
- smoking
- being a good fighter
- being up on cars
- know what's going on in the world of popular singers and movie stars.

15. Thinking of all the boys in this school, who would you most want to be like?
(Give both first and last names.)
-
-

16. Suppose the circle below represented the activities that go on here at school. How far out from the center of things are you? (Place a check where you think you are.)



17. Now, in the circle below, place a check where you would like to be.



18. Would you say you are a part of the leading crowd?

- yes
- no

If no: Would you like to be part of the leading crowd?

- yes
- no
- don't care

19. If a fellow came here to school and wanted to get in with the leading crowd, what fellows should he get to be friends with?

20. How much formal education did your father have?

- some grade school
- finished grade school
- some high school
- finished high school
- some college
- finished college
- attended graduate school or professional school after college
- don't know

21. How much formal education did your mother have?

- some grade school
- finished grade school
- some high school
- finished high school
- some college
- finished college
- attended graduate school or professional school after college
- don't know

22. What is your father's occupation? What does he do? Be as specific as you can.
(If he is dead, say what his occupation was.)

23. Does your mother have a job outside the home?

- yes, full time
- yes, part time
- no

24. How often do you attend church?

- every week
- 1 to 3 times a month
- less than once a month

25. If you could have any job you wanted, what would you most want to be?

26. Thinking realistically, do you think you will probably live in this town when you are out of school and have a job?

- definitely yes
- probably yes
- don't know
- probably no
- definitely no

27. What kind of work do you plan to go into when you finish your schooling?

28. Are you planning to go to college after high school?

- yes
- undecided
- no
- have not thought about it

29. If you could be remembered here at school for one of the things below, which one would you want it to be?

- outstanding student
- athletic star
- most popular

30. Which one of these things would be hardest for you to take -- your parents' disapproval, your teacher's disapproval, or breaking with your friend?

- parents' disapproval
- teacher's disapproval
- breaking with friend

31. Do you belong to any clubs or groups outside of school, such as a neighborhood club, scouts, or a church young people's group?

yes
 no

If yes, what are the names of the groups?

32. Which of the items below fit most of the boys here at school?
(Check as many as apply.)

friendly
 not interested in school
 hard to get to know
 crazy about cars
 active around school
 girl-crazy
 studious
 out for a good time
 sports-minded

33. Which of the items below fit most of the teachers here at school?
(Check as many as apply.)

friendly
 too strict
 too easy with schoolwork
 understand problems of teen-agers
 not interested in teen-agers
 willing to help out in activities

34. Among the items below, what does it take to be important and looked up to by the other fellows here at school?
(Rank from 1-6.)

coming from the right family
 leader in activities
 having a neat appearance
 high grades, honor roll
 being an athletic star
 being in the right crowd

John Smith